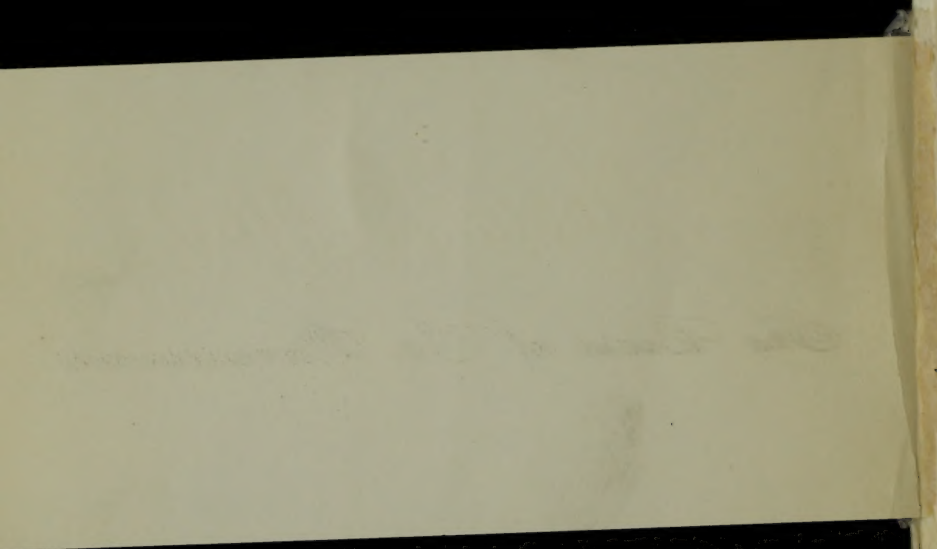
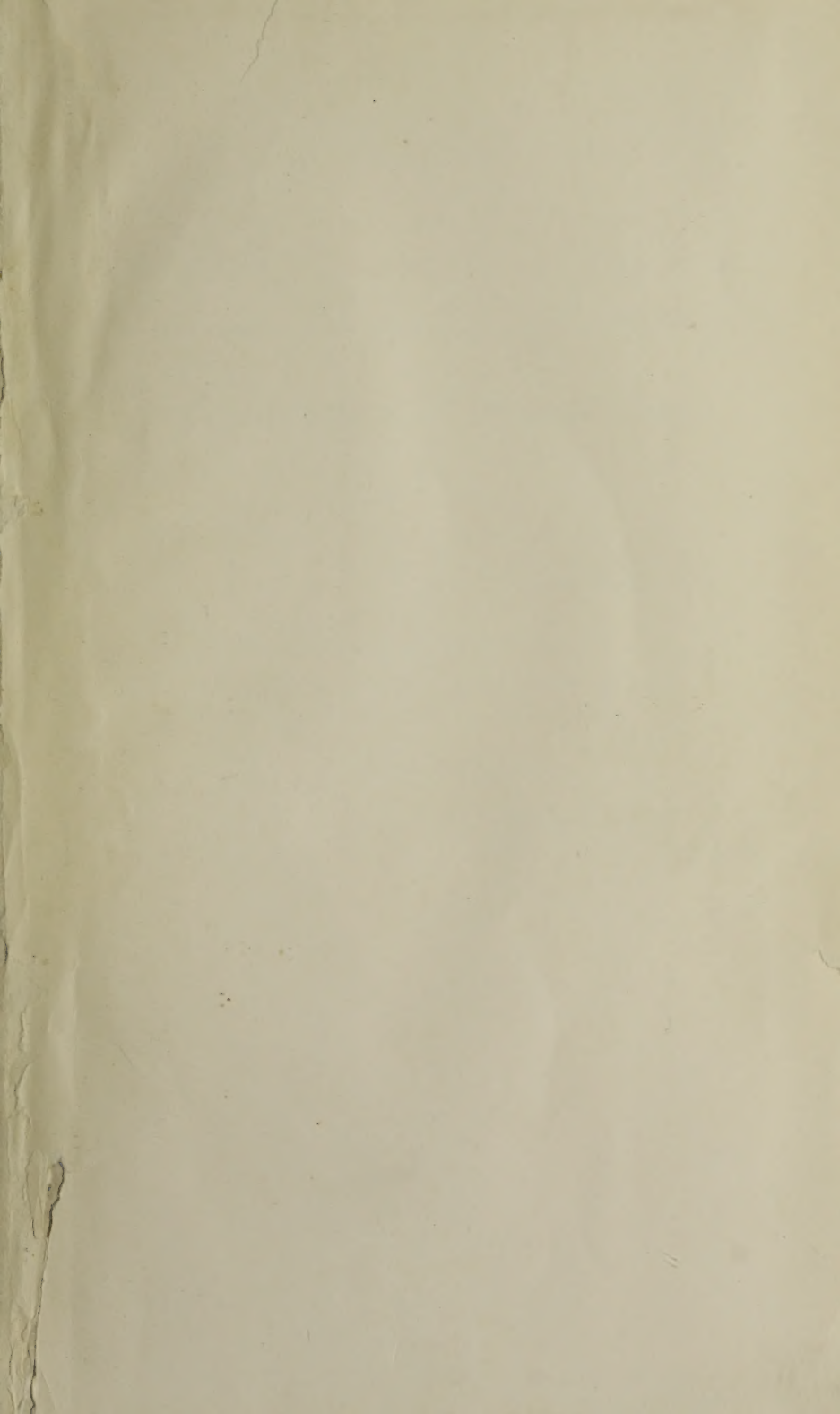


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The Board of Gas Commissioners.





HOUSE No. 38.

Commonwealth of Massachusetts.

OFFICE OF THE BOARD OF GAS COMMISSIONERS,
No. 13 BEACON STREET, BOSTON, Jan. 29, 1886.

Hon. JOHN Q. A. BRACKETT,
Speaker of the House of Representatives.

SIR : — The Board of Gas Commissioners transmits herewith its First Annual Report to the Legislature.

Respectfully yours,

STARKES WHITON,

Chairman.

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Commonwealth of Massachusetts.

OFFICE OF THE BOARD OF GAS COMMISSIONERS,
No. 13 BEACON STREET,
BOSTON, Jan. 29, 1886.

To the Honorable the Senate and House of Representatives: —

The Commissioners have the honor to submit the following report. The Act of the Legislature creating the Board is as follows: —

[CHAPTER 314, ACTS OF 1885.]

AN ACT TO ESTABLISH A BOARD OF GAS COMMISSIONERS.

Be it enacted, etc., as follows: —

SECTION 1. The governor, by and with the consent of the council, shall appoint three citizens of this Commonwealth, who shall constitute a board of gas commissioners, and the governor shall designate the chairman thereof. Said board shall have a clerk, to be appointed by the governor with the consent of the council, who shall keep a full and faithful record of its proceedings, and shall serve such notices and perform such other duties as the commissioners may require, and shall be sworn before entering upon the discharge of his duties.

SECT. 2. One of said commissioners shall be appointed for one year, one for two years and one for three years from the first day of July, eighteen hundred and eighty-five; and annually thereafter the governor shall appoint, as herein before provided, one commissioner to serve for three years from the first day of July in the year of his appointment, and until his successor is appointed and qualified. If a vacancy occurs by resignation or otherwise, the governor shall in like manner appoint a commissioner for the residue of the term, and may, with the consent of the council, remove any commissioner for cause after notice and hearing.

SECT. 3. Said commissioners shall be sworn to the faithful performance of the duties of their respective offices before entering upon the discharge of the same; shall not be in the employ of or

own any stock in any gas company, or be in any way directly or indirectly interested pecuniarily in the manufacture or sale of gas, or any article or commodity used by gas companies, or used for any purpose connected with the manufacture and sale of gas.

SECT. 4. The annual salary of the chairman of the board shall be three thousand dollars, and that of the other commissioners two thousand five hundred dollars each, to be paid monthly from the treasury of the Commonwealth. The commissioners shall be provided with an office in the state house or in some other suitable place in the city of Boston, in which their records shall be kept.

SECT. 5. The board may expend a sum not exceeding one thousand dollars annually in procuring necessary books, statistics and stationery, and in defraying expenses incidental and necessary to the discharge of their duties; and a sum not exceeding two thousand dollars annually in defraying the compensation and expenses of their clerk, payable monthly from the treasury of the Commonwealth.

SECT. 6. The annual expenses of the commissioners and clerk, including salaries, shall be borne by the several gas companies in proportion to their gross earnings, and shall be assessed and recovered in the manner provided for the assessment and recovery of the expenses of the railroad commissioners.

SECT. 7. Every gas company shall annually make a return to said board in a form and at a time prescribed by said board, setting forth the amount of its authorized capital, its indebtedness and financial condition on the first day of January preceding, and a statement of its income and expenses during the preceding year, together with its dividends paid or declared, and a list containing the names of all its salaried officers, and the amount of the annual salary paid to each; and said return shall be signed and sworn to by the president and treasurer of said company and a majority of its directors. Every such company shall also at all times on request furnish any statement or information required by the board concerning the condition, management and operations of the company, and shall comply with all lawful orders of said board.

SECT. 8. Said board shall have the general supervision of all corporations engaged in the manufacture and sale of gas for lighting and for fuel, and shall make all necessary examinations and inquiries and keep themselves informed as to the compliance of the several corporations with the provisions of law.

SECT. 9. Upon the complaint in writing of the mayor of a city or the selectmen of a town in which a gas company is located, or of twenty customers of such company, either of the quality or

price of the gas sold and delivered by such company, the board shall notify the company of such complaint by leaving at their office a copy thereof, and shall thereupon after notice give a public hearing to such petitioner and such company, and after said hearing may order, if they deem just and proper, any reduction in the price of gas or improvement in quality thereof; and they shall pass such orders and take such action as are necessary thereto, and a report of the proceedings and the result thereof shall be included in their annual report to the legislature.

SECT. 10. In any city or town in which a gas company exists in active operation, no other gas company, nor any other persons, shall dig up and open the streets, lanes and highways of such city or town, for the purpose of laying gas pipes therein, without the consent of the mayor and aldermen or selectmen of such city or town, after a public hearing before said mayor and aldermen or selectmen and notice to all parties interested by publication or otherwise.

SECT. 11. The board shall from time to time ascertain with what degree of purity the gas companies can reasonably be required to make and supply gas; and if any change in the existing laws requiring purity in gas shall be in their opinion desirable or expedient, they shall so report to the legislature in their next report.

SECT. 12. The board, whenever any such company violates or neglects in any respect to comply with the provisions of any law, or refuses or neglects to comply with any lawful order of the board, shall give notice thereof in writing to such corporation, and to the attorney-general, who shall take such proceedings thereon as he may deem expedient.

SECT. 13. Any court having jurisdiction in equity, in term time or vacation, may, on the application of said board, by any suitable process or decree in equity, enforce the provisions of this act and the lawful orders of said board.

SECT. 14. The board shall make an annual report of its doings to the legislature in January, with such suggestions as to the condition of affairs or conduct of the gas companies as may be deemed appropriate.

SECT. 15. Nothing in this act shall affect the office of gas inspector as constituted by chapter sixty-one of the Public Statutes, excepting that said inspector shall whenever requested by the board give to them such information and assistance as they may require, consistent with the duties of his office.

SECT. 16. Any gas company which, or any person who, is aggrieved by the decision of the mayor and aldermen or selectmen of a city or town under the provisions of the tenth section of this

act, may appeal therefrom to said board within thirty days from the notice of said decision, and said board shall thereupon give due notice and hear all the parties in interest and its decision thereupon shall be final.

SECT. 17. This act shall take effect upon its passage. [*Approved June 11, 1885.*]

This Commission bears a relation to the gas companies similar to that of the Railroad Commission to the railroad companies; and all the expenses of both are paid by the respective corporations over which they have supervision.

The Commissioners were appointed by His Excellency the Governor, July 2 last, and confirmed July 16. The first formal meeting was held August 1; and, after occupying temporarily a room in the State House, they removed October 20 to rooms assigned by the State House Commission on the fourth floor of No. 13 Beacon Street. These rooms, while adequate as offices, scarcely provide for practical work which the Board may at some future time be called upon to perform. It would be desirable if the State Inspector of Gas and Gas Meters could be provided with rooms in the building occupied by the Commissioners.

While Great Britain has for a long time exercised a close supervision over the gas companies of that country, no similar board, so far as the Commissioners are informed, has ever existed in the United States. Under these circumstances the Commission was compelled to fix upon its own course of procedure without the benefit of the experience of others. It has therefore endeavored by careful study and inquiry to prepare itself for intelligent action regarding the corporations under its supervision, and the relations of the people with them.

Although the use of gas is so common, the process and cost of its manufacture are not generally understood. The fact that its manufacture is a scientific process, and the secrecy generally maintained by the companies in regard to their business, have led the public to believe that it is enormously profitable. A marked exception to the general secrecy of the companies is shown by the Jamaica Plain Gas Light Company, which prints the annual report of its directors not merely for the use of its stockholders, but for distribution among its consumers as well.

Among the first duties performed by the Board was an examination of the works and methods of the various gas companies of the Commonwealth. A circular was also sent to nearly all the companies in the United States and Canada, containing questions bearing upon the sale and manufacture of gas. Replies were received from many corporations, but none from New York City, where the Consolidated Gas Company has seven gas plants (three coal, three water, and one coal and naphtha); from Philadelphia, where the works belong to the city and are managed by a board of trustees; from Baltimore, Chicago, and only one from Brooklyn, N. Y. The replies from Canada were generally more explicit than from companies in this country. Information obtained from all the sources referred to is compiled in the various tables that follow.

In this Commonwealth nearly all of the gas-works were visited by the entire Board or a majority, only three by a single member. Except in two or three instances, the officers of the companies readily gave all the information desired, and expressed a willingness to comply with any suggestions of the Commission. The following lists show the gas-works in active operation during the year, their location and capital, and the names of companies recently organized.

COMPANIES IN OPERATION JANUARY 1, 1885.

	CAPITAL.
1. Adams Gas Light Co.,	\$17,300
2. Amesbury & Salisbury Gas Light Co.,	1,250
3. Amherst Gas Co.,	10,000
4. Arlington Gas Light Co.,	70,000
5. Attleborough Union Gas Light Co.,*	23,200
6. Beverly Gas Light Co.,	40,000
7. Boston Gas Light Co.,	2,500,000
8. Brockton Gas Light Co.,	64,000
9. Brookline Gas Light Co.,	350,000
10. Cambridge Gas Light Co.,	700,000
11. Charlestown Gas Light Co.,	500,000
12. Chelsea Gas Light Co.,	300,000
13. Chicopee Gas Works,*	30,000
14. Citizens' Steam and Gas Light Co. of Lynn,	125,000

* Not incorporated.

	CAPITAL.
15. Citizens' Gas Light Co. of Quincy,	\$33,000
16. Citizens' Gas Light Co. of South Reading,	95,300
17. Clinton Gas Light Co.,	35,000
18. Danvers Gas Light Co.,	20,000
19. Dedham & Hyde Park Gas Co.,	100,000
20. Dorchester Gas Light Co.,	400,000
21. East Boston Gas Co.,	220,000
22. Easthampton Gas Co.,	30,000
23. Fall River Gas Works Co.,	288,000
24. Fitchburg Gas Co.,	60,000
25. Gloucester Gas Light Co.,	62,300
26. Great Barrington Gas Light Co.,	5,000
27. Greenfield Gas Light Co.,	50,000
28. Haverhill Gas Light Co.,	75,000
29. Ipswich Gas Light Co.,	16,000
30. Jamaica Plain Gas Light Co.,	200,000
31. Lawrence Gas Co.,	400,000
32. Leominster Gas Light Co.,	50,000
33. Lexington Gas Light Co.,	20,000
34. Lowell Gas Light Co.,	500,000
35. Lynn Gas Light Co.,	300,000
36. Malden & Melrose Gas Light Co.,	170,000
37. Manufacturers' Gas Light Co. (Fall River),	50,000
38. Marblehead Gas Light Co.,	40,000
39. Marlborough Gas Light Co.,	50,000
40. Milford Gas Light Co.,	72,300
41. Miller's River Gas Light Co. (Athol),	20,000
42. Mutual Gas Light Co. of Southbridge,	15,000
43. Nantucket Gas Light Co.,	36,000
44. Natick Gas Light Co.,	20,000
45. New Bedford Gas Light Co.,	225,000
46. Newburyport Gas Light Co.,	80,000
47. Newton & Watertown Gas Light Co.,	200,000
48. North Adams Gas Light Co.,	50,000
49. Northampton Gas Light Co.,	50,000
50. North Attleborough Gas Light Co.,	68,100
51. Pittsfield Coal Gas Co.,	62,500
52. Plymouth Gas Light Co.,	40,000
53. Roxbury Gas Light Co.,	600,000
54. Salem Gas Light Co.,	300,000
55. South Boston Gas Light Co.,	440,000
56. Springfield Gas Light Co.,	500,000
57. Taunton Gas Light Co.,	80,000
58. Waltham Gas Light Co.,	130,000
59. Westfield Gas Light Co.,	54,000
60. Woburn Gas Light Co.,	45,100
61. Worcester Gas Light Co.,	500,000

Total capital, \$11 588,350

In addition to the above there were works at the following places, viz. :—

	ESTIMATED VALUE.
At Chicopee Falls, owned by the Chicopee Falls Manufacturing Co.,	\$25,000
Holyoke, owned by the Holyoke Water Power Co.,	150,000
Lee, owned by an individual,	15,000
Middleborough, owned by an individual,	23,000
Ware, owned by the Otis Co.,	10,000
Webster, owned by the Stevens Linen Works,	40,000
Total estimated value,	<hr/> \$263,000

The 59 companies making returns to the Secretary of the Commonwealth during the year ending Dec. 31, 1885, show debts amounting to \$976,800. Of these companies, 45 show an aggregate surplus over capital and debts of \$2,173,967, while 11 show an aggregate deficit of \$331,606.

From the foregoing it appears that the amount invested in the 67 companies in active operation is about \$14,670,500, which is, without doubt, a low estimate. Although the amounts of surplus and deficit above mentioned are matters of book-keeping rather than fact, and some companies have neglected to charge off sums sufficient to offset depreciation, and others have allowed the cost of experiments and changes of appliances to increase their construction accounts, yet the enhanced value of the property of some of the larger companies, by investment of undivided profits in their works and the natural increase in the value of real estate in favored localities, considerably more than counterbalance the actual deficit of others.

Of the 11 companies reporting a deficit, the Citizens' Steam and Gas Light Company of Lynn returns a deficit of \$125,000. The amount appears to have been lost in its steam-heating business; it never manufactured gas for illuminating purposes. (Further reference to this company will be found under the head of Steam and Gas Heating.)

In addition to the works mentioned as in operation on January 1, the following companies have been recently organized, viz. :—

NAME.	Location.	Certificate of Organization Filed.	Capital.	Certificate of Payment of Capital Filed.
Consumer Gas Company of Boston, . . .	Boston, . . .	July 11, 1884, .	\$500,000	Dec 8, 1884.
The Bay State Gas Company, . . .	Boston, . . .	Dec. 2, 1884, .	500,000	Sept. 3, 1885.
The Somerville Gas Company, . . .	Somerville, . . .	May 13, 1885, .	500,000	None filed.
People's Gas Company, . . .	Taunton, . . .	May 20, 1885, .	50,000	" "
Economic Gas Light Company, . . .	Brockton, . . .	May 25, 1885, .	50,000	" "
Framingham Light, Heat, and Power Company,	Framingham, .	Aug. 5, 1885, .	5,000	" "
Cottage City Gas Company, . . .	Cottage City, .	Sept. 1, 1885, .	60,000	" "
Weymouth Gas Company, . . .	Weymouth, . .	Oct. 19, 1885, .	75,000	" "
Norwood Gas Light Company, . . .	Norwood, . . .	Oct. 26, 1885, .	12,000	Nov. 18, 1885.
Revere Gas Light Company, . . .	Revere, . . .	Nov. 9, 1885, .	50,000	None filed.

MANUFACTURE OF GAS.

Of the 67 works in operation in this Commonwealth, 52 make coal gas; 1, water gas for heating purposes; 1, water gas for illuminating purposes; 3, both coal and water gas; and 10, petroleum or oil gas.

Coal gas is produced by the distillation of bituminous coal in closed retorts. These retorts, of fire-clay, and usually of an oval or D shaped section, are arranged in a furnace heated by coke and known as a "bench." From one to seven retorts are employed in a bench; and a number of these benches, varying with the size of the works, are placed side by side, and known as a "stack." Into these retorts, which are maintained at a heat between cherry and white, the coal is charged at fixed intervals, usually of four hours. The charges vary in weight from one hundred and fifty to three hundred pounds to a retort, dependent upon the size of the retort, the heat and the time occupied in the distillation. By this heating about two-fifths of the weight of the coal is converted into products which are vapors at the temperature of the retort, and the remaining three-fifths is left behind as a porous mass known as coke.

This coke, after the volatile matters have been driven out, is drawn from the retorts and quenched with water; then either stored for sale or used to keep up the heat of the bench.

The vapors given off in the retorts are removed by vertical pipes rising from one end, and passing up to the hydraulic main placed horizontally above the bench. In the hydraulic main, which is a closed iron pipe, a part of the vapor is condensed to a liquid form. This liquid is partly water and partly tar; but the gas leaves the hydraulic main still containing a large amount of condensible matter.

From the hydraulic main it is led to a condenser. This is usually of such a form that the gas passes through a long series of pipes either exposed to the air or surrounded by water, where the temperature of the gas is greatly reduced. By this cooling more of the condensible products are obtained, consisting principally of tar. This tar and that from the hydraulic main is run into a cistern, from which it is pumped for sale.

Next to the condenser, or in some works between the condenser and the hydraulic main, is placed an exhauster, an appliance whose object is to relieve the pressure on the retorts. This pressure is caused by the friction of the gas in the pipes and various parts of the purifying apparatus, where it is obliged to pass through water and layers of solid materials. This exhauster, usually run by a steam engine, draws the gas from the retorts and forces it through the apparatus placed beyond.

The gas now freed from liquid impurities still contains ammonia and various gaseous sulphur compounds, which must be removed before the gas is commercially pure.

The removal of the ammonia is easily accomplished by washing with water. This is done in a great variety of ways, the object of all the forms of washer being to expose as great a surface of water to the action of the gas as possible. The water, after it has absorbed the ammonia, combined with the watery product from the hydraulic main, is then known as “ammoniacal liquor;” and from this, when properly treated, the greater part of the ammonia of commerce is obtained.

To remove the sulphur compounds, only two substances are commonly used, — moist lime, or moist oxide of iron. These are so arranged in iron vessels that the gas is obliged to pass through them, and the sulphur compounds are absorbed by the purifying material.

From the purifiers the gas passes to the station meter, where it is measured, and then into the holder, where it is stored until required for use. From here it passes through the street mains to the consumer.

Coal gas as sold in this State usually has mixed with it a small quantity of oil gas, in order to increase the candle power. The material from which this gas is distilled is called an “enricher.”

Oil Gas. — The principle involved in the production of oil gas is the same as that involved in the production of coal gas. The difference lies only in the material used, which is either petroleum or some of its products.

This is distilled in iron retorts, and is usually pure enough after washing with water to be passed into the holder.

The oil gas by itself is of very high illuminating power, but very liable to smoke; on that account it is usually diluted with air before delivery to the consumer. It is somewhat difficult to make this dilution uniform, and the gas may vary greatly from day to day.

Water Gas. — The manufacture of water gas is based on a different principle from that involved in the two processes described.

The basis of the process lies in the fact that when steam is passed through a bed of red-hot carbon, decomposition takes place; and two gases — carbonic oxide and hydrogen — are produced in nearly equal amounts, together with a small amount of carbonic acid. These gases — carbonic oxide and hydrogen — are combustible, but give a non-luminous flame. In order to make an illuminating gas of this it is mixed with a naphtha gas.

There are numerous patented forms of water-gas apparatus, but all are arranged in nearly the same manner.

In a boiler-like vessel lined with fire-brick, and called a “generator,” a fire of anthracite is built, and blown up by a blast of air until it is a bright red. The products of the combustion and the hot air are blown into a second vessel, similar to the generator, but filled in such a way with fire-brick as to leave spaces for the free circulation of the gases. This vessel is known as the “superheater,” and is heated by the gases blown in from the generator, which, after passing through the superheater, go to the chimney.

When the fire is hot enough in the generator, the valve between the superheater and chimney is closed, and a valve opening into the washer, previously kept closed, is opened. Superheated steam is now blown through the bed of glowing coal in the generator, and decomposed.

The gases thus formed pass into the superheater, in which they meet naphtha vapor and carry it through the hot fire-brick, where the vapor is converted into a permanent gas. After washing and purification in exactly the same way as coal gas, it passes to the holder.

The fire in the generator is gradually cooled by this operation, and after a certain period the valve opening into the washer is closed, the naphtha shut off, the valve between

the chimney and superheater opened, and air blown into the generator in place of steam, until the coal is again burning brightly and the superheater hot, when the manufacture of gas is again resumed.

This, in a general way, is a description of the processes in use in this State.

COST OF GAS.

An erroneous impression in regard to the cost of gas often arises from the custom of stating its cost in the holder without adding the expense of its distribution to consumers. In estimating the cost it is necessary to consider not only the price of coal and labor, repairs and renewals of apparatus, but also the extent of the pipes and their maintenance, the distance of the works from the centre of consumption, the amount of condensation and leakage, and the amount consumed. All these have a bearing on the cost of distribution, as do taxes and the expenses of management. The cost in turn is offset in a degree by the amount received for the residuals; viz., coke, tar and ammoniacal liquor.

Many of the items are affected so much by locality and the amount of business, that it is impossible to consider the cost in one place as a sure indication of what it should be in another. The amount of leakage depends largely upon the care used in laying the pipes, and somewhat on the character of the soil through which they pass. In the made land of East Boston, Boston proper and a few other places, settling of pipes is common, and the leakage very much greater than in a more favorable soil.

According to the last published reports of the three London companies, the loss by leakage was for the Gas Light and Coke Company 5.33 per cent.; for the South Metropolitan, 3.7 per cent.; and for the Commercial, 6.36 per cent. The fact that the Gas Light and Coke Company, with its greater consumption of gas, shows a greater loss than the South Metropolitan, distributing a little more than one-fourth as much, is partly explained by the fact that many of the street mains of the former are old and liable to leakage, and the principal works are nearly ten miles from the point where the consumption of gas begins. The loss of the

gas works at Berlin, Germany, is 8.04 per cent.; at the Washington, D. C., works it is 5.09 per cent.; and at Richmond, Va., it is estimated at 10 per cent. In this State the range of leakage is placed by the companies at from 5 to 30 per cent.

The taxes paid by the seven principal companies in the State amounted during the last year to \$121,717.09. In some instances this item has exceeded 20 cents a thousand feet sold.

Of the residuals, the production of coke averages about 1,400 lbs. to the ton (of 2,240 lbs.) of coal carbonized. The companies ordinarily use from 25 to 50 per cent., selling the rest at from 7 to 10 cents a bushel in small lots, and from \$2 to \$3.50 a chaldron at the works. The demand for this fuel appears to be governed somewhat by the efforts made by the companies to introduce it, by the care with which it is prepared for domestic consumption, and by the experience of people in using it.

In Lawrence, where the company breaks, screens and delivers it in as small quantities as a barrel, the demand exceeds the supply; the price being 37 cents a barrel, or \$4.50 a chaldron, delivered.

The production of tar ranges from $9\frac{1}{2}$ to 12 gallons a ton of coal carbonized; in two cases it was asserted to be still more. It is sold at from 60 cents to \$2.50 a barrel of fifty gallons. The former price is that obtained by some of the larger companies on the seaboard, and the latter by some of the companies in inland towns where the local demand absorbs the whole product. Some companies, able to sell their coke readily at a good price, burn more or less of their tar; but the economy of such use, like some other features of management, is questioned by many engineers.

For ammoniacal liquor only a few companies find sufficiently ready sale to make it profitable to undertake its collection and storage.

In this matter of residuals, the companies in this country are not as fortunate as are the London companies, which distill their ammonia and the larger part of their tar. Thus prepared, a ready market is found near at hand. The sales of the residual products of the three London companies

above referred to, for the half year ending June 30 last, amounted respectively to 58.12, 66.26, and 66.92 per cent. of the cost of coal used, and was more than enough to pay all expenses of distribution, management and taxes.

PRICE OF GAS.

The cost of making and distributing gas is perhaps more dependent upon the amount made and sold than that of almost any other commodity. Hence it is claimed that one company in any locality, provided it have sufficient appliances of the best kind, can make and deliver gas at a lower price than can be done by two or more companies in the same territory, with the same consumption but with the inevitable increase of capital for duplicate plant, and the expense of additional superintendence.

For these reasons, and for others growing out of the peculiar difficulties incident to the business itself, after a separate, perhaps hostile existence for a longer or shorter time, companies seeking their customers in the same city have thought it for their own interests to combine or consolidate, or by mutual understanding to confine their business to distinct districts.

The history of the business in London is a case in point. Previous to 1860 there were thirteen companies, each with a considerable capital, supplying gas to the people of that city. Competition was vigorously pushed, until the mains of several companies in indistinct lines lay side by side in the streets; and it frequently happened that the pipes of one company were unwittingly tapped for the services of another, so that while one furnished the gas the other received the pay. Frequent digging in the streets was necessary to find leaks, which each company charged to be in the main of another; and, although the price of gas was high, the companies were only able to pay small dividends or none at all. In 1860 these companies, under an agreement ratified by Parliament, first confined their supply to distinct districts. No return has been made to the former plan, but since that year several of the companies have been consolidated; and the whole metropolis is now supplied by three companies,

with a combined capital of about £14,000,000, one confining its business substantially to the North side, and the others dividing the South side between them.

It is not true, however, that the price of gas to the consumer bears a definite and constant relation to the cost to the company. Some companies have seemed to prefer a small consumption at a high price, assuring good dividends, to an increased consumption at a lower price, with no greater dividend. Many expedients have been adopted by local authorities and legislative bodies to secure fair treatment to consumers, and a good quality of gas at a price fairly proportionate to its cost. These efforts have for the most part failed of success.

Competition has been allowed and encouraged; but after a season of ruinous rates the companies have combined, and consumers have been compelled to provide good dividends for the extra capital employed. To insure lasting competition, companies have been chartered and forbidden by statute ever to consolidate with another company in the same locality; with the result, however, that after a time friendly owners have secured a controlling interest in both companies, and competition has ceased. It cannot be expected that two companies will long continue to ruin themselves for the benefit of the public.

It may fairly be presumed that under similar conditions the same kind of gas may be made and sold as cheaply by one company as another; and this significant fact may account in part for the failure of competition to secure for its promoters the results so earnestly sought. Whether the processes recently invented give well-grounded promise of more successful competition, involves the consideration of a long and confusing array of facts, which this Board has not yet had the opportunity to thoroughly investigate.

It may be added that the replies from more than one hundred companies to inquiries of the Commissioners show that there is no material difference in the average prices of coal gas and other gas (not including oil gas).

Legislatures have undertaken to fix the price by express statute, as in the District of Columbia, where by Act of Congress the Washington City Gas Light Company is required

to furnish gas at a certain price, to be modified upon a sliding scale dependent upon the cost of coal. Aside from the many difficulties of fixing by legislative acts an arbitrary price for different companies, under an infinite variety of conditions, it may well be doubted whether an extended adoption of this method would secure either to the companies a just and proper return for their capital and service, or to the consumer all the advantages to which favorable conditions entitled him. The failure of this method to secure the best price is shown in the case of the Washington Company, which easily finds itself able to supply gas at a price far below the minimum required by statute.

A more elaborate system has been adopted in England, where Parliament has fixed in the numerous acts affecting the metropolitan and many of the provincial companies a standard quality of gas, a standard price therefor, a standard rate of dividend, and has provided that for every penny per thousand feet charged in excess or in diminution of such standard price in any year, the standard rate of dividend shall for such year be reduced or increased by one quarter of one per cent. Under this plan and without competition, the price of gas in London, which in 1860 was four shillings and sixpence (\$1.08) a thousand feet, has been reduced to two shillings and eight pence (64 cents) in 1885; and the present price charged by the South Metropolitan Company is two shillings and six pence (60 cents). In addition to the price charged for gas every consumer is charged a meter rent, varying, according to the size of the meter, from nine pence (18 cents) to twelve shillings and six pence (\$3.00) a quarter; which rental appears in the statement of the Gas Light and Coke Company for the last year ending June 30, 1885, to amount to more than £24,000, or more than two per cent. of the sum received for gas. In this State there are but few companies which make a charge for meter rent, and those only when the amount of gas consumed is quite small.

It remained for this Commonwealth to adopt the most comprehensive scheme of State supervision yet devised for the protection both of the companies and the public. By such modifications of this plan as from time to time may seem advisable, it should be possible to secure not only a just and

proper relation between cost and price in every locality, but also to insure the adoption of such methods and appliances in manufacture as will produce the best quality of gas at the lowest cost.

The following table shows the price charged for gas by the several companies in the Commonwealth Dec. 31, 1885. The average candle power is that given by the State Inspector of Gas and Gas Meters as the mean of his tests for the year. The maximum price is the *net* price charged the small consumer, and the minimum price that to the consumer using the largest quantity. Between these two limits the price varies with the amount consumed.

No.	NAME.	Kind of Gas.	Average Candle Power.	Maximum Price.	Minimum Price.
1.	Adams, . . .	Coal, .	17.50	\$2 40	— ¹
2.	Amesbury, . . .	Oil, .	28.30	3 25	\$3 25
3.	Amherst, . . .	" .	31.05	6 00	4 50
4.	Arlington, . . .	Coal, .	17.30	3 00	3 00
5.	Attleborough, . . .	" .	16.17	2 25	2 25
6.	Beverly, . . .	" .	18.10	3 00	2 75 ²
7.	Boston, . . .	" .	18.93	1 50	1 50
8.	Brockton, . . .	" .	17.12	2 25	2 00
9.	Brookline, . . .	" .	17.22	2 50	2 25
10.	Cambridge, . . .	" .	17.20	1 75	1 65
11.	Charlestown, . . .	" .	17.42	1 75	1 75
12.	Chelsea, . . .	" .	17.89	2 50	2 25
13.	Chicopee, . . .	" .	17.17	3 25	2 25
14.	Citizens' (of Lynn), ³	— .	—	—	—
15.	Citizens' (of Quincy),	" .	18.20	3 00	1 75
16.	Citizens' (of South Reading), . . .	" .	16 77	3 50	3 00
17.	Clinton, . . .	" .	18.52	2 50	2 00
18.	Danvers, . . .	" .	17.25	3 39 $\frac{1}{2}$	3 15
19.	Dedham, . . .	" .	16 40	3 00	2 50
20.	Dorchester, . . .	" .	17.58	2 50	2 50
21.	East Boston, . . .	" .	17.92	2 00	2 00
22.	Easthampton, . . .	" .	17.60	3 00	2 60
23.	Fall River, . . .	" .	17.34	2 00	1 50
24.	Fitchburg, . . .	" .	16.77	2 50	2 25
25.	Gloucester, . . .	" .	17.57	2 25	2 25
26.	Great Barrington, .	Oil, .	24.15	3 50	3 50
27.	Greenfield, . . .	Coal, .	16 70	2 75	2 41 ⁴
28.	Haverhill, . . .	" .	18.21	1 60	1 60

¹ Rebate to mills owning stock.

² Extra discount to very large consumers.

³ See end of table.

⁴ Gas engines, \$2.50.

No.	NAME.	Kind of Gas.	Average Candle Power.	Maximum Price.	Minimum Price.
29.	Ipswich, . . .	Oil, .	25.60	\$5 00	\$3 00
30.	Jamaica Plain, .	Coal, .	17.54	2 50 ¹	2 37½ ²
31.	Lawrence, . . .	" .	17 95	1 60	1 40
32.	Leominster, . . .	Oil, .	30.10	5 00	5 00
33.	Lexington, . . .	" .	27.25	5 40	4 80
34.	Lowell, . . .	Coal, .	17.24	1 40 ³	1 40
35.	Lynn, . . .	Coal and water,	18.29	2 00	2 00
36.	Malden, . . .	Coal, .	18.06	2 50	2 50
37.	Manufacturers' (Fall River), . . .	" .	16.97	2 00	1 75
38.	Marblehead, . . .	" .	17.20	3 25	2 75 ⁴
39.	Marlborough, . . .	" .	17.37	3 00	2 85
40.	Milford, . . .	" .	16.17	2 00	1 90
41.	Miller's River (Athol),	Water, .	20.43	3 00	2 25
42.	Mutual (Southbridge),	Oil, .	22.05	3 50	3 32½
43.	Nantucket, . . .	Coal, .	17.70	3 00	3 00
44.	Natick, . . .	" .	17.33	2 85	2 85
45.	New Bedford, . . .	" .	17.20	1 80	1 40
46.	Newburyport, . . .	" .	17.33	2 50	2 50
47.	Newton, . . .	" .	17.41	2 50	1 80
48.	North Adams, . . .	" .	17.78	2 25	1 95
49.	Northampton, . . .	" .	17.00	2 50	2 25
50.	North Attleborough, .	" .	17.02	2 50	2 50
51.	Pittsfield, . . .	" .	18.26	2 25	1 87½
52.	Plymouth, . . .	" .	18.15	2 75	2 10
53.	Roxbury, . . .	" .	18.48	1 75	1 75
54.	Salem, . . .	" .	18 11	2 00	1 90
55.	South Boston, . . .	" .	17.86	2 00	1 50
56.	Springfield, . . .	" .	18.22	2 16	2 07
57.	Taunton, . . .	" .	17.44	1 75	1 50
58.	Waltham, . . .	Coal and water,	17.45	2 00	1 55
59.	Westfield, . . .	Coal, .	17.45	3 00	2 25
60.	Woburn, . . .	" .	17.60	2 00	2 00
61.	Worcester, . . .	Coal and water,	18.02	2 00 ⁵	2 00
62.	Chicopee Falls, . . .	Oil, .	35.90	5 00	4 00 ⁶
63.	Holyoke, . . .	Coal, .	17.85	2 25	2 02½
64.	Lee, . . .	Oil, .	54 65	7 50	7 50
65.	Middleborough, . . .	" .	26.90	5 00	4 00
66.	Ware, . . .	Coal, .	18.70	3 00	2 90
67.	Webster, . . .	" .	18.30	4 00	3 20

¹ After Jan. 1, 1886, \$2.25.² For public buildings only.³ After Mar. 1, 1886, \$1.30.⁴ Gas engines, \$2.00.⁵ After Jan. 1, 1886, \$1.80.⁶ To manufacturing companies.

The Citizens' Steam Heating and Gas Light Company of Lynn are selling non-illuminating gas at 50 cents a thousand feet.

TABLE OF RATES CHARGED FOR GAS BY COMPANIES IN OTHER STATES.

[The prices given are *net*, and are official unless otherwise noted.]

NAME.	Kind of Gas.	Maximum.	Minimum.
Albion, N. Y.,	Coal,	\$3 00	-
Ann Arbor, Mich.,	"	2 50	\$2 00
Attica, N. Y.,	Water,	2 50	-
Augusta, Me.,	Coal,	3 50	-
Aurora, Ill.,	"	2 30	2 20
Barnesville, O.,	"	2 65	2 45
Bath, Me.,	"	3 00 av.	-
Bath, N. Y.,	"	3 00	2 00
Bellaire, O.,	"	1 50	-
Bellefonte, Penn.,	"	2 00	1 80 ¹
Belleville, Ill.,	"	2 50	2 00
Belleville, Ont.,	"	2 50	1 50 ¹
Bethlehem, Penn.,	Water,	2 25	2 00
Binghamton, N. Y.,	"	1 90	1 70
Brantford, Ont.,	"	2 00	-
Bridgeton, N. J.,	Coal,	2 00	1 80
Brooklyn, N. Y., Brooklyn,	"	2 00	-
" " Metropolitan,	"	2 00	-
" " Peoples',	"	2 00	-
" " Nassau,	"	2 00	-
" " Williamsburg,	"	2 00	1 60
" " Citizens',	-	2 00	-
Bucyrus, O.,	Coal,	2 50	2 25
Buffalo, N. Y., Buffalo Mutual,	"	1 50	-
Burlington, Ia.,	"	2 50	2 20
Burlington, Vt.,	Water,	3 00	2 00
Cadiz, O.,	Coal,	2 25	-
Carbondale, Penn.,	"	3 00	2 40
Centralia, Ill.,	"	2 50	2 25
Charlestown, W. Va.,	"	2 52	1 50
Charlestown, W. Va.,	Water,	2 50	-
Charlotte, N. C.,	"	3 00	2 85
Chicago, Ill., Chicago,	Coal,	1 00	-
" " Consumers',	Water,	1 00	-
" " Hyde Park,	Coal,	1 75	-
" " Peoples',	"	1 50	-
Clyde, W. Va.,	Water,	3 00	-
Coldwater, Mich.,	Coal,	3 25.	2 50
Columbus, Ga.,	"	2 50	-
Columbus, O.,	"	1 25	1 15
Crawfordsville, Ind.,	"	2 50	-

¹ For heating, cooking and mechanical purposes.

² Discounts to large consumers.

TABLE OF RATES — *Continued.*

NAME	Kind of Gas.	Maximum.	Minimum.
Detroit, Mich.,	Coal,	\$1 75	\$1 50
Doylestown, Penn.,	"	3 15	—
Ellsworth, Me.,	"	2 50	—
Erie, Penn.,	"	2 14 $\frac{3}{4}$	—
Flint, Mich.,	Water,	2 00	—
Fort Wayne, Ind.,	Coal,	2 00	—
Frederickton, N. B.,	"	2 70	2 40
Galena, Ill.,	"	2 80	2 40
Georgetown, D. C.,	"	2 00	—
Geneva, N. Y.,	"	2 85	2 25
Gunnison, Col.,	"	3 40	3 00
Hamilton, Ont.,	"	1 80	1 50 ¹
Hanover, Penn.,	"	3 00	2 64
Huntingdon, Penn.,	Water,	2 00	—
Jamestown, N. Y.,	Coal,	2 25	1 80
Jeffersonville, Ind.,	"	2 25	—
Jersey City, N. J., Consumers',	Water,	1 25	—
Kankakee, Ill.,	Coal,	2 50	2 00
Kenton, O.,	"	2 50	2 00
Lafayette, Ind.,	"	2 00	—
La Porte, Ind.,	"	2 50	—
Lexington, Ky.,	Water,	2 00	1 90
Logan, O.,	Coal,	2 50	—
Madison, Ind.,	"	2 25	—
Marietta, O.,	"	2 70	2 20
Marysville, Cal.,	"	4 00	—
Massillon, O.,	"	2 35 av.	—
Meadville, Penn.,	"	1 80	1 50
Minneapolis, Minn.,	"	2 50	1 50
Montpelier, Vt.,	Water,	3 00	—
Montreal, Que.,	Coal,	1 50	1 20 ¹
Natchez, Miss.,	"	4 00	3 25 av.
New Albany, Ind.,	"	2 50	—
Newark, O.,	"	2 50	2 00
Newbern, N. C.,	"	3 00	—
New Brunswick, N. J.,	Water,	2 00	—
New York, N. Y.; Consolidated,	Coal and Water,	1 75	1 50
" " Equitable,	Water,	1 75	1 50
" " Mutual,	Coal and Water,	1 75	1 50
Niles, Mich.,	Coal,	2 50	—
Oberlin, O.,	"	2 50	2 25
Ottawa, Ont.,	"	2 25	—

¹ For heating, cooking and mechanical purposes.

TABLE OF RATES — *Concluded.*

NAME.	Kind of Gas.	Maximum.	Minimum.
Painesville, O.,	Coal,	\$2 00	—
Paris, Ill.,	"	3 00	\$2 35
Paris, Ky.,	"	3 00	—
Pawtucket, R. I.,	"	2 00	1 50
Petaluma, Cal.,	"	4 00	—
Philadelphia, Penn.,	"	1 60	—
Pittsburgh, Penn., East End,	"	1 60	—
Port Jervis, N. Y.,	Water,	2 50	2 00
Portsmouth, O.,	Coal,	2 00	1 80
Poughkeepsie, N. Y., Pough- keepsie,	"	1 90	—
Poughkeepsie, N. Y., Citizens',	Water,	2 00	1 50 ¹
Providence, R. I.,	Coal,	1 70	—
Rahway, N. J.,	"	2 50	2 00
Richmond, Va.,	"	1 50	—
Rochester, N. Y., Rochester,	"	2 00	—
" " Citizens',	"	2 00	1 50 ¹
Rockville, Conn.,	"	2 02 $\frac{1}{2}$	—
Sag Harbor, N. Y.,	Water,	3 00	—
Salem, O.,	Coal,	2 00	—
San Antonio, Texas,	"	4 00	2 90
San Raphael, Cal.,	"	3 50	—
Selma, Ala.,	"	2 50	2 00
Seneca Falls, N. Y.,	"	2 75	2 25
Shelbyville, Ind.,	"	2 70	—
Sidney, O.,	"	2 00	—
Smyrna, Del.,	"	2 50	—
Springfield, Mo.,	"	3 00	2 55
Sterling, Ill.,	Water,	2 50	—
St. Louis, Mo., Carondelet,	Coal,	2 37 $\frac{1}{2}$	—
Stratford, Ont.,	"	2 25	—
Streator, Ill.,	"	2 50	—
Troy, N. Y., Citizens',	"	3 00	2 00
Utica, N. Y.,	—	1 90	1 60
Vallejo, Cal.,	Coal,	4 00	3 00
Walla Walla, W. T.,	"	4 50	—
Warren, O.,	"	2 25	2 00
Warren, Penn.,	"	2 25	1 75
Washington, D. C.,	Coal and Water,	1 50	—
Washington, Penn.,	Coal,	1 50	1 00
Waterbury, Conn.,	Water,	1 75	1 50
Wheeling, W. Va.,	Coal,	90	—
Wilkesbarre, Penn.,	Water,	1 90	1 50
York, Penn.,	"	2 00	1 80
Youngstown, O.,	Coal,	1 50	1 20

¹ For heating, cooking and mechanical purposes.

PURITY OF GAS.

The State Inspector of Gas and Gas Meters, Mr. C. W. Hinman, has kindly aided the Board whenever requested, and has furnished, at regular intervals, the results of his inspections. These inspections show that during the year the candle power of the gas of all the companies has been above the standard. No company has exceeded the legal limit of sulphur, but six companies have in one instance each shown an excess of ammonia in their gas. The time of the Inspector is so fully occupied that he has made but few eudiometric analyses during the year. In the tests for carbonic oxide, a quantity in excess of the legal limit was found on three consecutive inspections in the gas of the Miller's River Company in Athol; on two inspections in that of the Worcester Company, and on one inspection in that of the Lynn Gas Light Company. The former company makes water gas only; the other two use a water-gas plant in connection with their coal gas works.

Three companies — the Great Burrington, the Amesbury and Salisbury, and the Marlborough — have shown once each a trace of sulphuretted hydrogen in their gas. The two former companies have no gas works, but are supplied from the plant of manufacturing companies, which tends to complicate questions arising in regard to the gas they distribute.

Not more than two inspections have been made of any oil gas. The highest candle power found was 61.3, at Lee, and the lowest 20, at Southbridge. Most of the oil gas companies mix atmospheric air, in greater or less quantity, with their gas, which accounts for the great discrepancy in illuminating power. In the form for annual returns the oil gas companies are requested to state the percentage of air used; and in any future report the Board expects to be able to add that item in the comparison of the candle power of this gas. The high candle power of oil gas does not, however, inure solely to the benefit of the consumer; for, though the consumption of sixty-candle gas may not exceed two feet an hour to a burner, yet the price is relatively as much greater than that of coal gas as the consumption is smaller. The price at Lee is about \$7.50 a thousand feet. The meters used by this

company register dollars and cents instead of cubic feet. There is some question in regard to the legality of the use of such meters.

In Canada, formerly, the standard candle power was in Nova Scotia 16, in Ontario 12 and in the other provinces 14; and gas was considered impure which contained over 20 grains of sulphur or over 2 grains of ammonia to 100 cubic feet. But the companies were frequently unable to meet the requirements regarding sulphur and ammonia; and in April, 1884, the limit of sulphur was fixed at 35 grains, and of ammonia at 4 grains to 100 cubic feet, and the candle power at 16 for all the Provinces.

The present standard for London (common gas) is candle power 16, the limit of sulphur 22 grains, and ammonia 4 grains to 100 cubic feet.

The law in the District of Columbia requires that gas shall be equal to 16 candles, and shall not contain more than 20 grains of sulphur nor more than 5 grains of ammonia in 100 cubic feet. It also provides for daily inspection (Sunday excepted), and imposes a penalty of \$100 for each day during which the quality of the gas falls below the standard.

It will be seen that in Washington, as well as in London and Canada, the standard of light is one candle higher, and the limit of ammonia at least one-half less than in this State.

The only restriction, so far as the Board is informed, in regard to carbonic oxide outside this State is in New Jersey, where the law provides that gas shall not contain "more than two per centum of carbonic oxide gas." The question of carbonic oxide has had the consideration of the last two legislatures, and no change has been made in the legal limit now existing.

It will be generally agreed that the consumers are entitled to receive gas of reasonable purity and at a reasonable price.

The question of purity is so involved and depends upon so many considerations, however, that the Board, until more extended investigation is made, does not consider it advisable to make any recommendation concerning the existing law governing the question. After a more comprehensive study of the matter in all its phases, it may be possible to suggest

a plan whereby the questions relating to the purity of gas, including inspections and penalties, shall be consistently regulated.

OWNERSHIP OF WORKS.

In its investigations the Board found that as a rule, consumers in towns where the gas works are owned and managed by their own townsmen, were more liberally treated than when the works were controlled by people living elsewhere.

Of the three violations of the law mentioned elsewhere, one was at Lee, where the works are said to be owned by a Mr. Wray residing in Watertown, N. Y. Another was the Miller's River Company at Athol, whose president and business manager, although a resident of Greenfield, is engaged in a business which calls him out of the State the greater part of the time; and eleven-twelfths of the stock is owned by parties residing outside the county in which the works are located.

LEASED WORKS.

During the past few months a disposition has been shown, by persons residing outside the State, to lease the property of various gas companies. The company at Brockton has leased its plant and works for a term of twenty years, to James S. Pierson of Brooklyn, N. Y., and Walter E. Lawton of New York city, who have sub-leased them to Malcolm Peters of Philadelphia.

It is a question which the legislature at no distant day may deem it wise to consider, how far it is proper or desirable to allow companies holding such important and valuable privileges in public streets, to delegate such rights to persons whose only interest in the place they supply with light, is the profit they can make.

In one small company, which allows its superintendent, who is also a stockholder and director, and a prominent citizen of the town in which the works are located, to operate the works for a share of the gross receipts instead of a fixed salary, there seems to be but little objection, especially if the arrangement is made subject to revocation at reasonable notice.

STEAM AND GAS HEATING.

The permission granted by sect. 52 of chap. 106, Public Statutes, for gas companies organized or chartered before the ninth day of April, 1879, to engage in the business of furnishing steam or hot water for heating, etc., has been availed of by only one company, — the Springfield Gas Light Company, which is now running a steam-heating plant in connection with its gas business.

The Citizens' Steam and Gas Light Company of Lynn, organized in 1880 for "making and selling gas for light, and generating and furnishing steam and hot water for heating, cooking and mechanical purposes," has abandoned its steam-heating business; and, a large portion of its stock having passed into the hands of the Lowe Manufacturing Company of Norristown, Penn., is now making water gas for fuel only. At the Lowe company's branch office in Lynn, the Board found the secretary of the gas light company; but the principal books of the corporation are kept by the president or treasurer, both of whom reside out of the State.

Of the companies recently organized, the Norwood Gas Light Company and the Framingham Light, Heat and Power Company have included in the business for which they are organized the generation of steam or hot water for heating and power.

The following companies propose to avail themselves of the provisions of chap. 240 of the Acts of 1885, and engage in the manufacture of fuel gas: —

The People's Gas Company of Taunton and the Economic Gas Light Company of Brockton are organized to "manufacture and sell gas for light and fuel."

The Cottage City Gas Company "to make, distribute and sell gas for lighting, heating and mechanical purposes."

The Somerville Gas Company; "the making and selling gas for light, for heating and cooking purposes, and for furnishing mechanical power."

Weymouth Gas Company, "for the manufacture and distribution and sale of gas for heating, cooking, lighting and mechanical purposes."

Framingham Light, Heat and Power Company, in addition

to the business of generating steam or hot water, proposes the “generating of gas or electricity for light, heat or power.”

CAPITALIZATION OF COMPANIES.

The public are interested in the capitalization of gas companies, as well as in their economy of manufacture and general management. Stockholders have a right to expect reasonable dividends on their investments; but, if an excess of capital is expended in building works by injudicious contracts, or experimenting with new methods or processes, either the consumers will be obliged to pay high prices, or the owners will receive small dividends or none at all. Thorough work and the use of the best material and apparatus should be secured in the construction of gas works. This is undoubtedly the truest economy, the truth of which is emphasized by the unfortunate experience of some companies in this State.

The Bay State Gas Company has recently been organized, with a capital of \$500,000, and has accepted the right granted by the Board of Aldermen of the city of Boston to lay pipes in every street, lane and highway in which gas pipes are now laid, and has commenced the construction of works. At the last session of the legislature this company made application for authority to increase its capital to \$5,000,000, which request was refused. In the prospectus of the Bay State Gas Company, Limited, organized under the laws of the State of Pennsylvania, after describing the extent of the works required by the Bay State Gas Company of Boston, the method of raising the amount of capital required is explained as follows:—

“In order to provide the money necessary to build a gas plant as large as above described, notwithstanding the limitation upon capital, part of the consideration paid to the Construction Company is an income bond payable in ninety-nine years, for four million five hundred thousand dollars, payable either in cash or in special and common stock of The Bay State Gas Company of Boston, at the option of the company, should the Legislature of Massachusetts ever authorize an increase of capital.

“This bond for four and a half millions of dollars, and all the capital stock of The Bay State Gas Company, excepting a small number of shares necessary to keep up the organization, will be held by The Fidelity Insurance, Trust and Safe Deposit Company, of Philadelphia, in trust, for the treasury of The Bay State Gas Company, Limited, organized under the laws of the State of Pennsylvania, whose sole office shall be to hold in its treasury the securities of The Bay State Gas Company of Boston.”

The prospectus also states that, “On the 11th day of March, 1885, a contract was entered into by The Bay State Gas Company of Boston with The Beacon Construction Company, Limited, of Philadelphia, for the building of its works.”

If there is no legal objection to the arrangement entered into by the Bay State Gas Company, it suggests an easy method for any company organized in this State to practically increase its capital to any amount desired. We believe, however, that it is very doubtful if such is the true intent of the laws relating to the organization of companies.

In connection with the subject of capitalization, the Board would suggest the expediency of providing by statute that in future no gas company be allowed to incur any obligation or issue any bonds exceeding a certain percentage of its capital stock, without special permission from the legislature, and then only to pay for property not already paid for by the capital stock.

ACCIDENTS.

Although not required by statute to investigate accidents caused by gas, yet the Board has, wherever practicable, inquired into such as have been brought to its notice. A brief account of the results of such investigation of three cases, occurring in Boston or the immediate vicinity, is given below.

On the evening of October 7 last, a stranger, somewhat intoxicated, registered at the Robertson House, Boston, and was assigned a room, to which he retired about nine o'clock. He was found insensible in his bed the next afternoon about half-past five, and was removed to the City Hospital, where he remained in an unconscious condition until the eleventh,

on which day he died. The cause of death reported to the City Registrar was, "Inhaling illuminating gas, probably accidental."

The room in which the accident happened was about $6\frac{1}{2}$ feet wide, 16 feet and 9 inches long, and 9 feet and 7 inches high, with the door at one end and a window at the other. Over the door was a transom, nearly closed; but the window-sash hung very loosely, and a curtain covered about three-fourths of its upper half. The walls of the room were painted.

The headboard of the bedstead was about $5\frac{1}{2}$ feet from the window, and midway between them was the only gas-burner in the room, — a bracket fixture 4 feet and 7 inches from the floor, and level with the top of the headboard. The burner cock was not provided with the usual stop, and when the room was entered on the eighth it was about one-third open and the gas was escaping.

According to the custom of the house, the gas was turned off at the meter at daylight that morning, and let on again a about 3.30 P. M.

It seems probable that the accident happened in one of three ways. The gas may have been blown out, a faint light may have been left until the gas was turned off in the morning, or the gas may have been extinguished at the burner cock in the early evening, and at the same time unwittingly turned on again and left in that condition.

The last theory is so probable that it may suggest the advisability of granting to health authorities some supervision over gas fittings in public lodging-houses, similar to that now had over plumbing.

It may be noted that the burner was a batwing lava tip, and contained no check except a gauze diaphragm; and, although marked as a six-foot burner, had a consumption of twelve and one-half feet an hour under a gas pressure of two inches of water. It would seem that the amount of gas which may have entered the room would equal not more than 7 per cent., and the amount of carbonic oxide not more than .54 per cent.

The second case was an explosion in College House, Cambridge. Two students, while searching for a leak with a

lighted match, were slightly burned and the walls of the room received some injury.

On the morning of December 12, an explosion occurred in the sewer in Blackstone Street, Boston. The manhole cover was blown into the air, and seventy-five or eighty panes of glass were broken in neighboring buildings. An odor of gas was noticed in some of the stores when opened in the morning, but no leaks were found in the fixtures. A leak in the street main was found more than a hundred feet away, and the facts suggest the readiness with which gas may find its way through the soil and sewers into buildings some distance away.

COMPLAINTS.

No complaint under the provisions of sect. 9 of the act establishing the Commission has been received; but on the 12th of August, the trustees of the Methodist Episcopal Church in Great Barrington complained that the supply of gas to their house of worship was irregular, and at times failed entirely. The Gas Light Company was at once informed of the complaint, and requested to ascertain and remove the cause if possible. At a later date a visit was made to Great Barrington, and it was found that the Gas Light Company did not manufacture the gas it distributed, but was supplied by the Berkshire Woolen Company from an oil-gas plant used for supplying its own mills. This somewhat complicated the question of responsibility. On the suggestion of the Board, steps were taken to correct the trouble complained of; and a close inspection, both on the part of the Gas Company and of the Woolen Company, has been instituted, which it is hoped will prevent a recurrence of the difficulty.

One other complaint, of a consumer who believed he was charged with a much greater amount of gas than he consumed, was investigated. The meter appeared to be correct, and the facts in regard to the number of burners in use and the time they were lighted satisfied the Board that the amount of gas charged had been consumed.

Complaints about bills for gas are common enough, but it very frequently happens that they are not based on good

reasons. A little care and watchfulness on the part of the consumer will probably show that the bills accurately indicate the amount consumed. Many companies furnish customers printed directions for reading meters, and by observing them and testing the burners the amount consumed can readily be determined. Should there be indications that the meter does not register accurately, the law provides that upon request the State Inspector shall test the meter, and if it is inaccurate the company must furnish a new one.

VIOLATION OF LAWS.

On December 2, notice was sent to the Miller's River Gas Light Company of Athol that the gas made by it had been found by the State Inspector, upon three consecutive inspections, to contain carbonic oxide as follows, viz: —

On Feb. 2, 1885,	.	.	.	.	.	.	.	29 17 per cent.
June 5, 1885,	.	.	.	.	.	.	.	30.62 " "
Nov. 5, 1885,	.	.	.	.	.	.	.	30.02 " "

said amounts being in each instance in excess of the legal limit (ten per cent.). This company was also notified at the same time that it appeared to have neglected to comply with the requirements of sect. 21 of chap. 105 of the Public Statutes, inasmuch as the treasurer, who appeared to act also as cashier, did not keep such a list of stockholders as is required by said sect. 21. No explanation has been made by the company in regard to either of these matters.

December 17, the proprietors of the Lee Gas Works were notified that they were found violating the provisions of sect. 11 of chap. 61 of the Public Statutes, in furnishing gas to their customers through meters which had not been sealed and stamped as required by said sect. 11.

On the same day, the Berkshire Woolen Company of Great Barrington was notified of the violation of the same section, by supplying the Great Barrington Gas Light Company through a meter which was not duly sealed and stamped. The Board has had further correspondence with the Lee Gas Works and the Berkshire Woolen Company, which have taken steps to comply with the law.

The notices were sent, as required by statute, to the companies and the Attorney-General, which in the opinion of the Board terminated its authority.

BOOKS AND ACCOUNTS.

Excepting a few small companies, which keep only an account of their receipts and expenditures, the several companies are usually systematic in the method of keeping their books, though varying somewhat in matters of detail.

While some keep separate accounts showing the cost or value of real estate, machinery, street mains and meters, others merge part or all these items into "construction" account. Some companies credit all gas as sold, upon the reading of the meters and the rendering of the bills, charging any bills not collected as "bad debts;" while others do not enter in their financial books any gas as sold until the same is paid for. Although the amount of bad debts is small, it would seem that this item should not be allowed to increase the cost of manufacture, but should appear rather as one of the results of management. In order to make an accurate comparison of the cost of *manufacturing* gas by the several companies, the same items should in every case be considered.

The financial year of the several companies varies greatly, as is shown by the following table.

The date when the books of the several companies are closed is as follows:—

DEC. 31 OR JAN. 1.

Boston.
Brookline.
Cambridge.
Charlestown.
Danvers.
Dedham.
Dorchester.
East Boston.
Easthampton.
Greenfield.
Lawrence.
Leominster.
Lynn.

DEC. 31 OR JAN. 1.

Malden.
Natick.
New Bedford.
Newburyport.
Newton.
Roxbury.
Salem.
South Boston.
Waltham.
Worcester.
Attleborough.

JAN. 15.	JUNE 30 OR JULY 1.
Springfield.	Amesbury.
Westfield.	Beverly.
	Chelsea.
FEB. 1.	Plymouth.
Nantucket.	Taunton.
	JULY 10.
MARCH 31 OR APRIL 1.	Lowell.
Clinton.	SEPT. 30 OR OCT. 1.
Fitchburg.	Adams.
Jamaica Plain.	Fall River.
Manufacturers' (Fall River).	Milford.
North Adams.	Woburn.
Northampton.	Wakefield.
Southbridge.	
APRIL 30.	NOVEMBER 1.
Pittsfield.	Amherst.
MAY 31 OR JUNE 1.	4TH MONDAY IN NOVEMBER.
Gloucester.	Lexington.
Ipswich.	NOV. 30 OR DEC. 1.
	Brockton.
2D MONDAY IN JUNE.	North Attleborough.
Haverhill.	Quincy.

In view of this lack of uniformity, both in details of book-keeping and time of closing accounts, it seems to be desirable to require of the gas companies, as was some years ago required of the railroad companies, a uniform date to which all their accounts should be made up. It would also be desirable to have the several companies adopt, so far as the amount of their business would admit, a uniform plan of book-keeping.

If the 30th day of September was adopted as a uniform date for all the gas companies to make up their accounts, it would be, as the books are now kept, at the end of the first quarter of 5 companies, the half-year of 7 companies, the end of the third quarter of 24 companies, and correspond with the financial year of 5 others; it would also make the financial year cover six consecutive months of heavy consumption, and six consecutive months of light consumption.

The views of the companies on this subject have not been obtained to any extent, and while the Commissioners cannot see any decided objection to the date proposed, it is possible that the managers of the companies can bring forward reasons why some other date would be more convenient; in any event, the Commissioners think it must be admitted that some uniform date should be fixed upon, convenient to all interested.

ANNUAL RETURNS.

In preparing the form of financial statement to be required of the several companies, the Board has had the advantage of consulting the form of return required by Act of Parliament to be made by the several London companies to the Metropolitan Board of Trade; and the form of "revenue account" used by these companies has been adopted, after some slight alterations, as that in which the companies of this State shall return their "income and expenses." The remainder of the financial return differs essentially from the form used in London, as might be expected when the widely different methods of capitalization and loans existing there are compared with the custom prevailing here.

In preparing the questions entitled "General Information," the Board has endeavored, while making the list quite full, to include only those inquiries essential to give a correct idea of each company's ability to supply present needs or future demands, and of its peculiar advantages or disadvantages.

The form of annual return adopted, and the communication sent with it, is shown in the Appendix.

Should the legislature see fit to adopt the suggestion of requiring all the companies to close their accounts on the 30th day of September, so that a balance sheet taken from the books at close of business on that day would agree with the form of annual return, the Commissioners would be able to give the companies about six weeks in which to prepare their returns, and still have time in which to arrange an abstract thereof to accompany their annual report.

LEGISLATION.

The attention of the Board has been called to the language of the statute defining the parties over whose affairs it has supervision.

The words company and corporation seem frequently to be used in such a way that the former may readily be held to include the latter, as well as any unincorporated association engaged in the business of making and selling gas. Certain of the smaller works in the State are either owned or operated by an individual, and it has been urged that it was not intended by the legislature to bring them under State supervision.

The Board does not agree with this opinion as to the intent of the act, but believes that if such be the proper construction of the words the omission was accidental, since otherwise it might become an easy thing for the larger part of the companies or corporations wholly to escape the supervision which was intended.

The question is of importance also, since in the act creating the Board the language of the earlier legislation seems to have been adopted.

In the Public Statutes, chap. 61, inspection and a certain degree of purity is required of companies or corporations, and in chap. 105 authority to dig up streets is for companies or corporations.

From this it appears that unless the words in the act of 1885 are held to include all persons making and selling gas, it may well be doubted whether an individual proprietor can acquire any franchise in the public streets, although a formal license may have been granted him by the city or town authorities.

The Board begs leave to suggest that it may be saved future embarrassment by such an amendment of the law as shall clearly include within its operation all persons who undertake the making and selling of gas within the State.

Under the law, as it exists in this State, a gas company cannot be compelled to sell its product to anyone under any conditions, whether for public or private use.

Although an owner of buildings situated on the line of its

pipes may comply with all reasonable regulations of the company, it may still, for any reason or for no reason at all, refuse to supply him with gas.

A gas company usually enjoys privileges practically exclusive, and a valuable franchise in the public streets as a free gift from the public.

Having this exclusive control, it may well be claimed that such company might properly be bound to furnish, under proper restrictions, gas to all who are willing to comply with the rules and regulations adopted by the company.

In England and some of the United States, the supplying of gas is by law compulsory under carefully-guarded conditions.

It is believed that a law might be devised which would be of mutual advantage to the public and the companies, so as to ensure to the former reasonable and proper accommodations, and impose no undue hardship upon the latter.

CONCLUSION.

The Commissioners have intentionally abstained from discussing theoretical subjects, and confined themselves to simple statements of facts ascertained regarding the gas business; and, in referring to subjects upon which legislation seems desirable, no particular form has been included. No abstracts from the returns required of the companies are given, as they could not be obtained before the date at which the report must be presented to the legislature.

Respectfully submitted,

STARKES WHITON,
EDWARD T. ROWELL,
FORREST E. BARKER,

Board of Gas Commissioners.

APPENDIX.

COMMONWEALTH OF MASSACHUSETTS.

OFFICE OF THE BOARD OF GAS COMMISSIONERS,
No. 13 BEACON STREET,
BOSTON, Dec. 21, 1885.

To the Presidents and Directors of the several Gas Companies in the Commonwealth:—

Blanks for the Annual Returns to this Board, as required by law (chap. 314, Acts of 1885), are sent herewith. The blanks are sent in duplicate, and the several companies are desired to keep an accurate copy of the return made, as it may be found convenient for reference in making future returns.

As these returns are the first called for under the act referred to (extracts from which are printed on the third page of this cover), the questions have been extended to a greater length than is likely to be required hereafter, and it is earnestly requested that the managers of all companies make special effort to have their returns as accurate as possible, in order that the Commissioners may have reliable information not only in regard to the financial condition of the several companies, but also of the condition and extent of their works, and their adaptability to meet increasing demands from the public.

When, from any cause, an answer to any particular question is not required, the person preparing the return will please fill the space designed for the answer with a dash (—) or other mark, to indicate that the question has not been overlooked.

Please observe the various explanatory foot-notes.

Manufacturing and other companies engaged in the manufacture of gas for sale in connection with their other business, will please estimate the value of their gas plant (when not already separated on their books), and answer all other questions fully.

While the Commissioners wish to give the companies all needed time in which to prepare the returns, they also desire to be in a position to communicate to the legislature any information it may require, and have fixed upon *Monday, the first day of February* next, as the time on or before which the returns must be made to the Board.

Although special questions (see pages 21 and 22) have been arranged for companies making oil or water gas, those companies are nevertheless expected to answer as many of the other questions as the nature of their business admits. Any inquiries or other communications in relation to the returns should be addressed to Starkes Whiton, Chairman of the Board, at this office.

Per order of the Board of Gas Commissioners,

WALTER S. ALLEN, *Clerk.*

RETURN OF THE COMPANY TO THE BOARD
OF GAS COMMISSIONERS OF MASSACHUSETTS,

FOR THE YEAR ENDING DEC. 31, 1885.

- Please give full corporate title of company.
Location of principal business office.
How organized (under general law or special act)?
Date of organization (if under general law).
Date of incorporation (if under special act).
Dates of amendatory acts (if any).
Date or dates when capital was paid in.

SCHEDULE A.

STATEMENT OF CAPITAL AT CLOSE OF BUSINESS, Dec. 31, 1885.

1. Capital authorized by charter, \$
2. Capital authorized by votes of company,
3. Capital paid in :
 a shares, par value, \$ \$
 b shares, per cent. called in, actually
 paid in on same,
4. TOTAL CAPITAL PAID IN, \$
Whole number of stockholders,
 Males,
 Females,
Amount of stock held by females, shares,
Amount of stock held by trustees, shares,
Number of stockholders resident in Massachu-
setts,
Amount of stock held in Massachusetts, shares,

BONDS, DEBT AND COST OF PLANT.

5. Statement of bonds issued, viz. : —

DATE.	TENOR.	HOW SECURED.	RATE OF INTEREST.	AMOUNT.

6. Total amount of bonds issued,	\$
7. Floating debt (not including notes given, or amounts due, for supplies, etc.),	
8. Capital paid in, as per item 4,	
9. Total liability for capital and loans,	\$
10. Cost of real estate, as shown by books of the company, \$	
11. Cost of machinery, apparatus, and other appliances used in the manufacture of gas, as shown by books,	
12. Cost of street mains, as shown by books,	
13. Cost of meters, as shown by books,	
14. Cost of other permanent works, not included in above (stating nature thereof),	
15. Total cost of plant as per books of the company, . . . \$	
16. Amount (if any) charged to construction during the year, \$	

COMPARISON OF VALUES.

17. Assessed value of real estate,	\$
18. Assessed value of machinery and apparatus,	
19. Assessed value of any other property included in items 12, 13 and 14,	
20. Total assessed value of plant,	\$
Total cost, as per item 15,	
21. Excess of * value over * value,	\$
Total cost of plant, as per item 15,	\$
Amount of capital and loans, as per item 9,	
22. Cost of plant † than capital and loans,	\$

* This blank to be filled with the word "assessed" or "cost" as required.

† This blank to be filled with the word "more" or "less" as required.

SCHEDULE B.
STATEMENT OF INCOME AND EXPENSES, for the Year ending Dec. 31, 1885.

EXPENSES.		DOLLS.	Cts.	INCOME.		DOLLS.	Cts.
FOR MANUFACTURE OF GAS :				FROM SALE OF GAS :			
1. Coals (other than those used for enriching), including all expenses of depositing at works,				1. Public lamps (number) \$			
2. Enrichers,				Estimated consumption feet,			
3. Purifying materials,				3. Under contracts,			
4. Water,				4. Total from sale of gas,			
5. Wages of superintendents and engineers at works,				FROM RESIDUAL PRODUCTS :			
6. Other wages at works,				5. Coke, bushels,			
7. Repairs and maintenance of works (including renewal of retorts),				6. Tar, barrels,			
8. Apparatus and machinery,				7. Ammoniacal liquor,			
Less old material sold,				8. Total from sale of residuals,			
FOR DISTRIBUTION OF GAS :				FROM RENT OF METERS AND STOVES :			
9. Wages of clerks engaged in this department, and salary or commission of collectors,				9. Rent of meters			
10. Repairs, renewals and maintenance of mains and service pipes,				10. Rent of gas stoves (number),			
11. Repairs and renewals of meters,				FROM OTHER SOURCES,* VIZ. :			
Less old material sold				11. Public lamps other than gas lamps,			
FOR PUBLIC LAMPS :				12.			
12. Lighting and repairing (gas lamps only),				13.			
13. Lighting and repairing, and materials used for, other lamps,				14.			
FOR OFFICE EXPENSES AND MANAGEMENT :							
14. Directors' allowances,							
15. Salaries of accountants, clerks and messengers,							
16. Salaries of officers,							
17. Rent of offices,							
18. Stationery, printing and postage,							
19. Other office expenses,							
FOR MISCELLANEOUS EXPENSES :							
20. Taxes. Town or city,							
Corporation,							
State inspection,							
21. Fire insurance,							
22. Bad debts,							
23. Law expenses,							
24. Other items, viz. :							
a							
b							
25. Total expenses,				15. Total receipts,			
26. Balance to profit and loss,							

* Not including items of rent and interest which must appear in Schedule C.

SCHEDULE C.

PROFIT AND LOSS ACCOUNT, Dec. 31, 1885.

<p>For balance from last account (if any),</p> <p>Interest on bonds, loans and deposits,</p> <p>Dividends declared on stock, viz.:</p> <p style="padding-left: 2em;">per cent. due.</p> <p style="padding-left: 2em;">Per cent. due.</p> <p>Other items (giving particulars), viz :</p> <p>Amount carried to reserved fund,</p> <p>Amount carried to depreciation fund,</p> <p>Balance (if surplus),</p>	<hr/> \$
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<p>By balance from last account (if any)</p> <p>Balance of income as per item 26, Schedule B</p> <p>Interest received on loans or deposits,</p> <p>Rents,</p> <p>Other items, viz.:</p> <p>Balance (if deficit),</p>	<div style="float: right;">\$</div> <hr/> \$
--	--

SCHEDULE D.

RESERVED FUND ACCOUNT.

RESERVED FUND ACCOUNT.		Dr.
1. By balance of account December 31, 1884.	\$	
2. Income during the year from amount invested,	:	
3. Amount transferred from profit and loss account,	:	
	:	
	:	
	:	
4. For (any sums charged to this account during the year, stating the purpose for which the same were used),	:	\$
5. Balance Dec. 31, 1885,	:	
	:	
	:	
	:	
6. How is fund invested?	:	\$

SCHEDULE E.

DEPRECIATION FUND ACCOUNT.

[illegible]

SCHEDULE F.

BALANCE SHEET, Dec. 31, 1885.

ASSETS.		LIABILITIES.	
Real estate,	\$	Capital stock,	\$
Machinery and manufacturing appliances,		Bonds issued,	
Street main,		Notes payable (please say whether secured by mortgage or not),	
Meters,		Unpaid bills,	
Cash on hand,		Deposits,	
Due for gas,		Unpaid dividends,	
Other accounts due the company,		Reserved fund,	
Tar and coke on hand,		Depreciation fund,	
Coal on hand,			
Other supplies on hand,			
Horses, wagons, etc.,			
Office furniture,			
Notes receivable,			
Investments (including any real estate not occupied by the company for, or in connection with, the business of manufacture and distribution),			
Total assets as per books of the company,	\$	Total liabilities as per books of the company,	\$
Profit and loss balance (if deficit),	\$	Profit and loss balance (if surplus),	\$

GENERAL INFORMATION.

Area of land occupied by the company.

Number of retorts viz. : —

BENCHES.	NUMBER OF RETORTS IN EACH.	MAKER OF RETORTS.	SIZE OF RETORTS.	KIND OF FURNACE.	KIND OF SETTING.

Kind of lids used,

Size of stand-pipes,

Number, shape and size of hydraulic mains,

Number of dip-pipes in each,

On what number are valves used?

Average space (in inches) between top of bench and bottom of hydraulic mains,

Length and size of pipe from hydraulic mains to condenser,

What portion of such length is sheltered?

What portion of such length is underground?

Number, kind, and capacity per hour of exhausters,

Is each rotary exhauster fitted with compensator?

With automatic bye-pass valves?

Is each engine running exhauster fitted with automatic gas-governor?

If jet exhauster is used, is it so fitted?

Kind of gas governor so used,

Kind and dimensions of condensing apparatus (giving such dimensions as will indicate area of condensing surface),

Description and dimensions of scrubbers and washers,

Number and size (inside dimensions) of purifiers,

Relative positions of exhauster, condensers, washers and purifiers : —

- 1.
- 2.
- 3.
- 4.
- 5.

Materials used in purifiers,
 Method of arranging the same in purifiers,
 Cost per bushel, amount used, bushels.
 Quantity of gas purified per bushel, cubic feet.
 Kind of sieves or trays used,
 Kind of centre seal,
 Diameter of connecting pipes in purifying house,
 Capacity of station meter per diem,
 Manufacturer of station meter,
 Number of holders and their location, viz. : —

No.	OPEN OR COVERED.	LOCATION.*	DIMENSIONS.	WORKING CAPACITY.

* If not "at works" the distance therefrom.

Kind of station governor,
 Which of the foregoing appliances are provided with bye-pass mains?
 Number and capacity of steam-boilers,
 Number and capacity of steam-engines,
 Number and capacity of steam-pumps,
 Sizes of street mains and length of each size,
 Usual day pressure on street mains as indicated at works,
 Usual night pressure on street mains as indicated at works,
 Estimated capacity of works per diem,
 Number of feet of gas made during the year,
 " " " sold by meter during the year,
 " " " supplied to public lamps during the year,
 " " " used at works and offices during the year,
 " " " used in the mills of the company* during the year,
 " " " unaccounted for during the year,
 Kind of meter in use, and by whom made,
 Number of meters in use by consumers at the close of the year,
 Capacity of meters and number of each size in use, viz. : —
 Number of gas stoves in use by consumers at the close of the year,
 Number of gas engines in use by consumers at the close of the year,
 Price per 1,000 feet at the close of the year, .

* This question will only require an answer from companies engaged in other manufactures.

Are any discounts allowed; and upon what rule are such discounts made?

When was such price established?

Price previous to that date,

Price for public lamps,

Estimated hourly consumption of each lamp, cubic feet.

Average number of hours each lamp is lighted during the year,

Kind of burner principally used on public lamps,

Kind of burner principally used by, or recommended to, consumers,

Average candle power of the gas burning at the rate of five feet per hour,

Kind of burner used in making the test,

Number of tons of coal carbonized (not including any used as an enricher),

Kinds of coal so used,

Proportions of each if used together,

Average cost of same per ton of 2,240 lbs., delivered at works,

What materials are used for enriching the gas?

What amount of each is used per ton of coal carbonized?

Average cost of same delivered at the works: —

Material \$ per amount used,

Prices now obtained for residuals: —

Tar per barrel,

Coke per chaldron,

Ammoniacal liquor per

Of the coke made what percentage is used in the furnaces?

How much tar is used in the furnaces?

In what manner is it used?

Average number of men employed at works, viz.: —

	FOREMEN.	ENGINEERS.	STOKERS.	YARD MEN.	OTHER MEN.
April to Sept., inclusive, .					
Oct. to March, inclusive, .					

Average wages of men employed at works, viz.: —

Foreman, per month, \$

Engineers, " \$

Stokers, " \$

Yard men, " \$

Other men, " \$

Average number of benches employed from October to March, inclusive,

Average number of benches employed the remainder of the year,
 Average life (in actual use) of retorts, in benches torn out during the year,
 Average total production of gas per retort in such benches.

ONLY THOSE COMPANIES MAKING "WATER GAS" ARE TO ANSWER
 THE QUESTIONS ON THIS PAGE.

What patent process, if any, is used in the manufacture of the gas?
 How long has such process been employed?
 Is said process used alone, or as an auxiliary to the making of coal gas?
 If used as an auxiliary, how often is it so used and how long each time?
 At what point in the works is the gas so made mixed with the coal gas?
 What kind of fuel is used for *generating the gas*?
 Amount so used,
 Cost of same per ton of 2,240 pounds, delivered at works,
 What kind of fuel is used for *generating the steam*?
 Amount so used,
 Cost of same per ton of 2,240 pounds delivered at works,
 Number of gallons of naphtha used,
 Cost per gallon, cents.
 Gas produced per gallon, cubic feet.
 Number of gallons of petroleum used,
 Cost per gallon, cents.
 Gas produced per gallon, cubic feet.
 Dimensions of generator,
 " of superheater,
 " of condenser or washer,
 Usual length of runs,
 Capacity of works per hour, as observed in actual use,

ONLY THOSE COMPANIES MAKING "OIL GAS" ARE TO ANSWER THE
 QUESTIONS ON THIS PAGE.

What patent process, if any, is used in the manufacture of the gas?
 How long has such process been employed?
 Number of gallons of naphtha used,
 Average price per gallon, cents.
 Number of gallons of petroleum used,
 Average price per gallon, cents.
 Number of gallons of other oils used,

Average price per gallon, cents.
Gas produced per gallon of naphtha, cubic feet.
Gas produced per gallon of petroleum, cubic feet.
Gas produced per gallon of other oils, cubic feet.
What amount of coal or other fuel was used?
Kind of coal or other fuel so used,
Cost of same per ton of 2,240 pounds, delivered at works,
What percentage of the gas in the holder is atmospheric air?
At what point in the works is the air mixed with the gas?

NAME AND RESIDENCE OF OFFICERS

President,
Vice-President,
Manager,
Superintendent,
Treasurer,
Clerk of the Corporation,

NAME AND RESIDENCE OF DIRECTORS.

President.

Treasurer.

Directors.

COMMONWEALTH OF MASSACHUSETTS.

ss.

1886.

Then personally appeared

and severally made oath to the truth of the foregoing statement by them
subscribed, according to their best knowledge and belief.

Justice of the Peace.

SECOND ANNUAL REPORT

OF

THE BOARD

OF

GAS COMMISSIONERS

OF THE

Commonwealth of Massachusetts.

JANUARY, 1887.

BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.
1887.

Commonwealth of Massachusetts.

The Board of Gas Commissioners respectfully submits its Second Annual Report.

During the year the following gas companies have been organized under the general law, viz. : —

The Spencer Gas Company, with a capital of \$50,000, “for the manufacture, distribution and sale of gas for light and for fuel and for furnishing mechanical power, and also for furnishing electric light ;” certificate of organization filed July 31. This company expected to have its works in operation about the beginning of the new year.

The Gas and Electric Lighting Company of Waltham, with a capital of \$20,000, “for manufacturing and selling gas for lighting, heating and other purposes, and the manufacturing, generating and selling of electricity for lighting, heating and other purposes ;” certificate of organization filed August 6. As the objects sought by the corporators, who were stockholders in the Waltham Gas Light Company, appear to have been attained through an arrangement with that company, it is probable that no business will be done under the charter of the new corporation.

Of the companies mentioned in the last report as having been recently organized, the Cottage City Gas Company and the Norwood Gas Light Company are now manufacturing gas, the former using the Loomis (water gas) apparatus, the latter making coal gas in the works recently occupied by George H. Morrill & Co. in connection with their business of manufacturing printers’ ink. The Bay State Gas Company of Boston is constructing works suited for the manufacture of water gas under the Flannery patents. None of

the other companies appear to have made progress toward the transaction of the business for which they were organized.

The name of the Attleborough Union Gas Light Company (not incorporated) has, by vote of its stockholders, been changed to Attleborough Gas Light Company.

By special Acts of the last Legislature, the name of the Marblehead Gas Light Company was changed to Marblehead Gas and Electric Light Company, and that of the Dedham and Hyde Park Gas Company to Dedham and Hyde Park Gas and Electric Light Company.

The following list shows the names of the companies in active operation on the 30th day of June last, with the location of the principal business office of each, and the localities in which each supplies gas:—

	NAME OF COMPANY.	Location of Business Office.	Localities Supplied.
1	Adams Gas Light Co.,	Adams, . . .	Adams.
2	Amesbury and Salisbury G. L. Co.,	Amesbury, . . .	Amesbury.*
3	Amherst Gas Co.,	Amherst, . . .	Amherst.
4	Arlington Gas Light Co.,	Arlington, . . .	Arlington. Belmont. Winchester.
5	Attleborough Gas Light Co.,	Attleborough, . . .	Attleborough Village.
6	Beverly Gas Light Co.,	Beverly, . . .	Beverly.
7	Boston Gas Light Co.,	Boston, . . .	Boston (city proper).
8	Brockton Gas Light Co.,	Brockton, . . .	Brockton.
9	Brookline Gas Light Co.,	Brookline, . . .	Brookline. Boston (Brighton District).
10	Cambridge Gas Light Co.,	Cambridge, . . .	Cambridge. Somerville (West of B. & L. R.R.).
11	Charlestown Gas Co.,	Charlestown, . . .	Charlestown. Somerville (East of B. & L. R.R.). Medford (in part). Everett (1 consumer).
12	Chelsea Gas Light Co.,	Chelsea, . . .	Chelsea.
13	Chicopee Gas Works,	Chicopee, . . .	Chicopee Centre.
14	Citizens' Steam and Gas Light Co. of Lynn,†	Lynn, . . .	Lynn.
15	Citizens' Gas Light Co. of Quincy,	Quincy, . . .	Quincy.
16	Citizens' Gas L't Co. of S. Reading,	Wakefield, . . .	Wakefield. Stoneham. Reading.
17	Clinton Gas Light Co.,	Clinton, . . .	Clinton.
18	Cottage City Gas Co.,‡	Cottage City, . . .	Cottage City.
19	Danvers Gas Light Co.,	Danvers, . . .	Danvers.

* That part of Salisbury in which gas was supplied by this company has been annexed to Amesbury.

† This company is engaged mainly in experimental manufacture of fuel water gas.

‡ Works operated by contractor up to July 1, 1886.

	NAME OF COMPANY.	Location of Business Office.	Localities Supplied.
20	Dedham and Hyde Park Gas and Electric Light Co.,	Dedham, . . .	Dedham. Hyde Park.
21	Dorchester Gas Light Co., . . .	Dorchester, . . .	Boston (Dorchester Dis- trict). Milton.
22	East Boston Gas Co.,	East Boston, . . .	Boston (East Boston).
23	Easthampton Gas Co.,	Easthampton, . . .	Easthampton.
24	Fall River Gas Works Co., . . .	Fall River, . . .	Fall River (in part).
25	Fitchburg Gas Co.,	Fitchburg, . . .	Fitchburg.
26	Gloucester Gas Light Co., . . .	Gloucester, . . .	Gloucester.
27	Great Barrington Gas Light Co., . . .	Gt. Barrington, . . .	Great Barrington.
28	Greenfield Gas Light Co., . . .	Greenfield, . . .	Greenfield.
29	Haverhill Gas Light Co., . . .	Haverhill, . . .	Haverhill. Bradford.
30	Ipswich Gas Light Co.,	Ipswich, . . .	Ipswich.
31	Jamaica Plain Gas Light Co., . . .	Jamaica Plain, . . .	Boston (Ward 23).
32	Lawrence Gas Co.,	Lawrence, . . .	Lawrence. Methuen.
33	Leominster Gas Light Co., . . .	Leominster, . . .	Leominster.
34	Lexington Gas Light Co., . . .	Lexington, . . .	Lexington.
35	Lowell Gas Light Co.,	Lowell, . . .	Lowell.
36	Lynn Gas Light Co.,	Lynn, . . .	Lynn. Swampscott.
37	Malden and Melrose Gas L't Co., . . .	Malden, . . .	Malden. Melrose. Medford (in part). Everett.
38	Manufacturers' Gas Light Co., . . .	Fall River, . . .	Fall River (in part).
39	Marblehead G. and Elec. L't Co., . . .	Marblehead, . . .	Marblehead.
40	Marlborough Gas Light Co., . . .	Marlborough, . . .	Marlborough.
41	Milford Gas Light Co.,	Milford, . . .	Milford. Hopedale.
42	Miller's River Gas Light Co., . . .	Athol, . . .	Athol.
43	Mutual G. L't Co. of Southbridge, . . .	Southbridge, . . .	Southbridge.
44	Nantucket Gas Light Co.,	Nantucket, . . .	Nantucket.
45	Natick Gas Light Co.,	Natick, . . .	Natick.
46	New Bedford Gas Light Co., . . .	New Bedford, . . .	New Bedford.
47	Newburyport Gas Co.,	Newburyport, . . .	Newburyport.
48	Newton and Watertown G. L. Co., . . .	Newton, . . .	Newton. Watertown. Wellesley. Weston.
49	North Adams Gas Light Co., . . .	North Adams, . . .	North Adams.
50	Northampton Gas Light Co., . . .	Northampton, . . .	Northampton.
51	North Attleborough Gas L't Co., . . .	N. Attleborough, . . .	North Attleborough. Attleborough Falls. Wrentham.
52	Norwood Gas Light Co.,	Norwood, . . .	Norwood.
53	Pittsfield Coal Gas Co.,	Pittsfield, . . .	Pittsfield.
54	Plymouth Gas Light Co.,	Plymouth, . . .	Plymouth.
55	Roxbury Gas Light Co.,	Roxbury, . . .	Boston (Roxbury Dis- trict).
56	Salem Gas Light Co.,	Salem, . . .	Salem. Peabody.
57	South Boston Gas Light Co., . . .	South Boston, . . .	Boston (South Boston).
58	Springfield Gas Light Co., . . .	Springfield, . . .	Springfield.
59	Taunton Gas Light Co.,	Taunton, . . .	Taunton.
60	Waltham Gas Light Co.,	Waltham, . . .	Waltham.
61	Westfield Gas Light Co.,	Westfield, . . .	Westfield.
62	Woburn Gas Light Co.,	Woburn, . . .	Woburn.
63	Worcester Gas Light Co.,	Worcester, . . .	Worcester.

The towns of Lee and Middleborough are supplied from works owned by individuals. There are also works at Chicopee Falls, owned by the Chicopee Manufacturing Co.; Holyoke, owned by the Holyoke Water Power Co.; Ware, owned by the Otis Co.; and at Webster, owned by the Stevens Linen Works.

The four last-mentioned works are used primarily to supply the mills of the several proprietary corporations, but furnish gas to the public in the respective localities where situated. A few consumers in Dudley are supplied from the works at Webster.

The date and manner of organization, par value of shares and capital of the several companies, is as follows:—

NAME OF COMPANY.	WHEN AND HOW ORGANIZED.		PAR VALUE.	CAPITAL.
	Date.	Manner.		
Adams,	1860	G	\$25 00	\$17,300 00
Amesbury,	1860	G	50 00 *	1,250 00
Amherst,	1878	G	100 00	10,000 00
Arlington,	1854	S	100 00	70,000 00
Attleborough,	—	A	100 00	23,200 00
Bay State (Boston),	1884	G	100 00	500,000 00
Beverly (ordinary stock),	1859	G	100 00	40,000 00
Beverly (special stock),	—	—	—	11,800 00
Boston,	1823	S	500 00	2,500,000 00
Brockton,	1859	G	100 00	64,000 00
Brookline,	1853	S	100 00	350,000 00
Cambridge,	1852	S	100 00	700,000 00
Charlestown,	1846	S	50 00	500,000 00
Chelsea,	1852	S	100 00	300,000 00
Chicopee,	1850	A	—	30,000 00
Citizens' (Lynn),	1880	G	100 00	125,000 00
Citizens' (Quincy),	1860	S	100 00	33,000 00
Citizens' (Wakefield),	1862	G	100 00	95,300 00
Clinton,	1854	S	500 00	35,000 00
Cottage City,	1885	G	100 00	60,000 00
Danvers,	1861	G	50 00	20,000 00
Dedham,	1853	S	50 00	100,000 00
Dorchester,	1854	S	100 00	400,000 00
East Boston,	1853	S	25 00	220,000 00
Easthampton,	1864	G	100 00	30,000 00
Fall River,	1880	G	100 00	288,000 00
Fitchburg,	1852	S	50 00	60,000 00
Gloucester,	1853	S	50 00	62,300 00
Great Barrington,	1855	G	100 00	5,000 00
Greenfield,	1854	S	50 00	50,000 00

* 25 per cent. paid in.

NAME OF COMPANY.	WHEN AND HOW ORGANIZED.		PAR VALUE.	CAPITAL.
	Date.	Manner.		
Haverhill,	1853	S	\$50 00	\$75,000 00
Ipswich,	1877	G	100 00	16,000 00
Jamaica Plain,	1853	S	100 00	200,000 00
Lawrence,	1849	S	100 00	400,000 00
Leominster,	1873	G	100 00	50,000 00
Lexington,	1874	G	100 00	20,000 00
Lowell,	1849	S	100 00	500,000 00
Lynn,	1853	G	100 00	300,000 00
Malden,	1854	S	100 00	170,000 00
Manufacturers' (Fall River), . .	1880	S	100 00	50,000 00
Marblehead,	1854	S	100 00	40,000 00
Marlborough,	1865	S	100 00	50,000 00
Milford,	1854	S	100 00	72,300 00
Miller's River (Athol),	1884	G	100 00	40,000 00
Mutual (Southbridge),	1871	G	50 00	15,000 00
Nantucket,	1854	S	100 00	36,000 00
Natick,	1873	G	100 00	20,000 00
New Bedford,	1850	S	100 00	225,000 00
Newburyport,	1850	S	100 00	80,000 00
Newton,	1854	S	100 00	200,000 00
North Adams,	1864	S	100 00	50,000 00
Northampton,	1853	S	25 00	50,000 00
North Attleborough,	1855	G	100 00	68,100 00
Norwood,	1885	G	100 00	12,000 00
Pittsfield,	1853	S	100 00	62,500 00
Plymouth,	1853	S	100 00	40,000 00
Roxbury,	1852	S	100 00	600,000 00
Salem,	1847	S	100 00	300,000 00
South Boston,	1852	S	100 00	440,000 00
Springfield,	1847	S	100 00	500,000 00
Taunton,	1853	S	50 00	80,000 00
Waltham,	1853	S	100 00	130,000 00
Westfield,	1868	G	100 00	54,000 00
Woburn,	1854	S	100 00	45,100 00
Worcester,	1851	S	100 00	500,000 00
			-	\$12,192,150 00

NOTE.—G denotes organized under General Law; S, under Special Act; and A, Association (not incorporated).

Of the 64 companies the following have bonds outstanding :

Brockton,	\$35,000
Citizens' (Lynn),	115,000
Citizens' (Quincy). (Notes on long time),	13,500
Ipswich,	6,600
Malden,	50,000
Miller's River (Athol),	20,000
Newton,	25,000
North Attleborough. (Dividend Scrip due 1906),	68,100
Waltham,	20,000

The value of the works owned by individuals and manufacturing companies is estimated as follows : —

Lee,	\$10,000
Middleborough,	22,000
Chicopee Falls,	25,000
Holyoke,	100,000
Ware,	10,000
Webster,	18,000

The company at Fitchburg supplies water, that at Gloucester maintains a public wharf and also supplies water, and that at Springfield furnishes steam for heating purposes ; but the capital used in such operations is not separated from that invested in the gas works. The sum given in the table is the total capital of each company.

The following table shows the number of stockholders in each company, together with certain classifications of said holders : —

NAME OF COMPANY.	Total Number.	Number resident in Massachusetts.	Number of Males.	Number of Females.	Number of Trustees.	Number of Executors and Administrators.	Number of Institutions and Corporations.
Adams,	6	6	3	1	—	—	2
Amesbury,	34	30	17	4	—	13	—
Amherst,	21	21	16	5	—	—	—
Arlington,	61	43	40	18	1	1	1
Attleborough,	29	26	18	9	—	2	—
Bay State (Boston),	15	9	14	—	1	—	—
Beverly,	46	39	35	9	—	—	2
Boston,	681	613	258	245	126	38	14
Brockton,	52	51	28	20	3	—	1
Brookline,	117	107	62	30	16	6	3
Cambridge,	382	341	158	167	51	3	3
Charlestown,	250	235	108	96	26	14	6
Chelsea,	121	116	71	39	3	8	—
Chicopee,	2	2	—	—	—	—	2
Citizens' (Lynn),	5	—	5	—	—	—	—
Citizens' (Quincy),	55	52	42	12	—	—	1
Citizens' (Wakefield),	62	55	45	15	2	—	—
Clinton,	17	17	7	5	3	—	2
Cottage City,	21	18	19	—	1	—	1
Danvers,	43	43	34	9	—	—	—
Dedham,	41	36	27	11	1	—	2
Dorchester,	195	181	107	58	24	3	3
East Boston,	123	102	65	40	16	1	1
Easthampton,	35	30	21	12	—	2	—
Fall River,	71	54	41	25	1	3	1
Fitchburg,	31	29	19	11	1	—	—
Gloucester,	60	57	30	24	1	3	2
Great Barrington,	10	10	9	1	—	—	—
Greenfield,	38	27	15	19	1	—	3
Haverhill,	52	45	31	15	1	3	2

NAME OF COMPANY.	Total Number.	Number resident in Massachusetts.	Number of Males.	Number of Females.	Number of Trustees.	Number of Executors and Administrators.	Number of Institutions and Corporations.
Ipswich,	28	28	26	2	—	—	—
Jamaica Plain,	132	121	54	48	13	15	2
Lawrence,	178	166	78	66	29	—	5
Leominster,	61	58	42	19	—	—	—
Lexington,	33	30	29	4	—	—	—
Lowell,	260	224	116	127	14	2	1
Lynn,	165	159	73	67	16	3	6
Malden,	140	121	77	52	5	1	5
Manufacturers' (Fall River),	7	7	1	—	—	—	6
Marblehead,	30	22	13	14	1	1	1
Marlborough,	12	12	8	2	—	1	1
Milford,	49	47	31	17	—	—	1
Miller's River (Athol),	9	9	7	1	—	—	1
Mutual (Southbridge),	29	27	21	5	2	1	—
Nantucket,	57	53	49	8	—	—	—
Natick,	39	39	25	9	—	5	—
New Bedford,	147	138	55	60	13	18	1
Newburyport,	65	49	28	26	6	3	2
Newton,	175	164	87	72	10	—	6
North Adams,	43	32	29	12	—	—	2
Northampton,	40	30	15	17	4	3	1
North Attleborough,	37	34	27	9	—	1	—
Norwood,	10	9	10	—	—	—	—
Pittsfield,	50	42	10	29	1	9	1
Plymouth,	28	21	14	8	4	2	—
Roxbury,	245	238	114	89	36	2	4
Salem,	256	239	99	103	24	24	6
South Boston,	28	23	14	11	3	—	—
Springfield,	89	79	47	36	2	2	2
Taunton,	100	96	39	44	2	13	2
Waltham,	84	80	42	35	7	—	—
Westfield,	23	20	15	5	3	—	—
Woburn,	44	41	16	18	4	6	—
Worcester,	185	174	80	75	26	1	3
	5,554	5,027	2,786	1,990	504	213	111

The number and value (at par) of the shares held by the respective classes is given on the following page:—

NAME OF COMPANY.	HELD IN MASSACHUSETTS.		HELD BY MALES.		HELD BY FEMALES.		HELD BY TRUSTEES.		HELD BY EXECUTORS, ETC.		HELD BY INSTITUTIONS, ETC.	
	No. of Shares.	Value.	No. of Shares.	Value.	No. of Shares.	Value.	No. of Shares.	Value.	No. of Shares.	Value.	No. of Shares.	Value.
Adams,	692	\$17,300 00	377	\$9,425 00	55	\$1,375 00	-	-	-	-	280	\$6,500 00
Amesbury,	83	1,037 50	41	512 50	12	150 00	-	-	47	\$587 50	-	-
Amherst,	100	10,000 00	82	8,200 00	18	1,800 00	-	-	-	-	7	700 00
Arlington,	431	43,100 00	523	52,300 00	138	13,800 00	20	\$2,000 00	12	1,200 00	-	-
Attleborough,	220	92,000 00	194	19,400 00	32	3,200 00	-	-	6	600 00	-	-
Bay State (Boston),	4,958	495,800 00	1,085	108,500 00	-	-	3,915	391,500 00	-	-	-	-
Beverly,	307	30,700 00	246	24,600 00	128	12,600 00	-	-	-	-	28	2,800 00
Boston,	4,642	2,321,000 00	2,031	1,015,500 00	1,079	539,500 00	1,363	681,500 00	377	188,500 00	180	75,000 00
Brookline,	639	63,900 00	281	28,100 00	197	19,700 00	112	11,200 00	-	-	50	5,000 00
Brookline,	3,314	331,400 00	1,698	169,800 00	553	55,300 00	885	88,500 00	292	29,200 00	72	7,200 00
Cambridge,	6,315	631,500 00	3,940	394,000 00	2,118	211,800 00	859	85,900 00	43	4,300 00	40	4,000 00
Charlestown,	9,040	452,000 00	5,034	251,700 00	1,980	99,000 00	1,818	90,900 00	825	41,250 00	343	17,150 00
Chelsea,	2,949	294,900 00	1,545	154,500 00	998	99,800 00	20	2,000 00	437	43,700 00	-	-
Chicopee,	-	-	-	-	-	-	-	-	-	-	-	-
Citizens' (Lynn),	-	-	1,250	125,000 00	-	-	-	-	-	-	45	4,500 00
Citizens' (Quincy),	321	32,100 00	228	22,800 00	59	5,900 00	-	-	-	-	-	-
Citizens' (Wakefield),	947	94,700 00	615	61,500 00	140	14,000 00	198	19,800 00	-	-	7	3,500 00
Clinton,	70	35,000 00	34	17,000 00	18	9,000 00	11	5,500 00	-	-	5	500 00
Cottage City,	368	36,800 00	594	59,400 00	-	-	1	100 00	-	-	-	-
Danvers,	400	20,000 00	386	19,300 00	14	700 00	-	-	-	-	-	-
Dedham,	1,785	89,250 00	1,380	69,000 00	458	22,900 00	12	600 00	-	-	150	7,500 00
Dorchester,	3,628	362,800 00	2,917	291,700 00	643	64,300 00	338	33,800 00	45	4,500 00	57	5,700 00
East Boston,	7,813	195,325 00	6,531	163,275 00	1,313	32,825 00	884	20,850 00	22	2,200 00	100	2,500 00
Easthampton,	268	26,800 00	181	18,100 00	103	10,300 00	-	-	16	1,600 00	-	-
Fall River,	2,562	256,200 00	1,083	108,300 00	1,599	159,900 00	57	5,700 00	129	12,900 00	12	1,200 00
Fitchburg,	1,083	54,150 00	778	38,900 00	399	19,950 00	23	1,150 00	-	-	-	-
Gloucester,	1,227	61,350 00	644	32,200 00	347	17,350 00	6	300 00	224	11,200 00	25	1,250 00
Great Barrington,	50	5,000 00	12	1,200 00	4	400 00	34	3,400 00	-	-	-	-
Greenfield,	875	43,750 00	432	21,600 00	261	13,050 00	12	600 00	-	-	205	14,750 00
Haverhill,	1,290	64,000 00	995	49,750 00	322	16,100 00	10	500 00	122	6,100 00	51	2,550 00
Ipswich,	160	16,000 00	154	15,400 00	6	600 00	-	-	-	-	41	4,100 00
Jamaica Plain,	1,865	186,500 00	679	67,900 00	445	44,500 00	473	47,300 00	362	36,200 00	285	28,500 00
Lawrence,	3,679	367,900 00	1,605	160,500 00	1,258	125,800 00	852	85,200 00	-	-	-	-
Leominster,	492	49,200 00	334	33,400 00	165	16,550 00	-	-	-	-	-	-
Lexington,	173	17,300 00	170	17,000 00	30	3,000 00	-	-	-	-	-	-
Lowell,	4,504	450,400 00	2,737	273,700 00	1,623	162,300 00	519	51,900 00	21	2,100 00	100	10,000 00
Lynn,	2,937	293,700 00	1,752	175,200 00	739	73,900 00	335	33,500 00	18	1,800 00	156	15,600 00

Malden,	1,380	138,000 00	965	96,500 00	543	54,300 00	117	11,700 00	21	2,100 00	54	5,400 00
Manufacturers' (Fall River),	500	50,000 00	16	1,600 00	—	—	2	200 00	2	200 00	484	48,400 00
Marblehead,	815	31,500 00	268	26,800 00	108	10,800 00	—	—	—	—	20	2,000 00
Marlborough,	500	50,000 00	135	13,500 00	121	12,100 00	—	—	239	23,900 00	5	500 00
Milford,	721	72,100 00	466	46,600 00	210	21,000 00	—	—	—	—	47	4,700 00
Miller's River (Athol),	400	40,000 00	246	34,600 00	4	400 00	—	—	—	—	50	5,000 00
Mutual (Southbridge),	266	13,300 00	203	10,150 00	57	2,850 00	20	1,000 00	20	1,000 00	—	—
Nantucket,	347	34,700 00	309	30,900 00	33	3,300 00	—	—	—	—	18	1,800 00
Natick,	200	20,000 00	163	16,300 00	23	2,300 00	—	—	14	1,400 00	—	—
New Bedford,	2,188	218,800 00	770	77,000 00	670	67,000 00	358	35,800 00	438	43,800 00	14	1,400 00
Newburyport,	646	64,600 00	433	43,300 00	177	17,700 00	120	12,000 00	28	2,800 00	42	4,200 00
Newton,	1,867	186,700 00	1,105	110,500 00	769	76,900 00	90	9,000 00	—	—	36	3,600 00
North Adams,	463	46,300 00	195	19,500 00	240	24,000 00	—	—	45	1,125 00	65	6,500 00
Northampton,	1,251	31,275 00	999	24,975 00	670	16,750 00	86	2,150 00	—	—	200	5,000 00
North Attleborough,	674	67,400 00	569	56,900 00	111	11,100 00	—	—	1	100 00	—	—
Norwood,	101	10,100 00	120	12,000 00	—	—	—	—	—	—	—	—
Pittsfield,	585	58,500 00	83	8,300 00	222	22,200 00	60	6,000 00	196	19,600 00	64	6,400 00
Plymouth,	307	30,700 00	271	27,100 00	71	7,100 00	33	3,300 00	25	2,500 00	—	—
Roxbury,	5,838	588,800 00	3,895	389,500 00	1,162	116,200 00	863	86,300 00	21	2,100 00	59	5,900 00
Salem,	2,827	282,700 00	1,449	144,900 00	878	87,800 00	205	20,500 00	287	28,700 00	181	18,100 00
South Boston,	394	39,400 00	4,225	42,250 00	128	12,800 00	47	4,700 00	—	—	—	—
Springfield,	4,550	455,000 00	2,836	283,600 00	1,943	194,300 00	41	4,100 00	125	12,500 00	55	5,500 00
Taunton,	1,522	76,100 00	393	39,650 00	1,003	50,150 00	29	1,450 00	167	8,350 00	8	800 00
Waltham,	1,230	123,000 00	679	67,900 00	426	42,600 00	195	19,500 00	—	—	—	—
Westfield,	477	47,700 00	364	36,400 00	63	6,300 00	113	11,300 00	29	2,900 00	—	—
Woburn,	427	42,700 00	274	27,400 00	113	11,300 00	35	3,500 00	20	2,000 00	—	—
Worcester,	4,605	460,500 00	2,781	278,100 00	1,442	144,200 00	662	66,200 00	20	2,000 00	95	9,500 00
	104,868	\$10,757,737 50	66,878½	\$6,404,987 50	28,439½	\$2,886,800 00	15,783	\$1,962,400 00	4,676	\$541,362 50	3,776	\$354,800 00

* Not divided into shares; owned by the Dwight Manufacturing Co. and Ames Manufacturing Co.

In the amount of stock held by corporations is included 475 shares of the par value of \$28,500, held by the gas companies themselves; seven companies holding 445 shares of their own stock of the par value of \$25,500; two of the same companies holding 30 shares in other companies of the par value of \$3,000.

From the foregoing tables the following facts are derived: —

Average number of shares held by each stockholder,	. . . . .	21.5
“ “ “ “ “ Massachusetts stockholder,	. . . . .	20.9
“ “ “ “ “ male stockholder,	. . . . .	24.5
“ “ “ “ “ female stockholder,	. . . . .	14.3
“ “ “ “ “ trustee,	. . . . .	31.3
“ “ “ “ “ executor, etc.,	. . . . .	22.0
“ “ “ “ “ institution, etc.,	. . . . .	34.0

The value of the shares held by —

Males, is	52.72 per cent. of the whole.
Females, is	23.76 “ “ “
Trustees, is	16.15 “ “ “
Executors, etc., is	4.45 “ “ “
Institutions, etc., is	2.92 “ “ “

The value of the shares held by stockholders residing in Massachusetts is 88.53 per cent. of the whole.

A comparison of the returns made for the year ending Dec. 31, 1885, with those of the same companies for the year ending June 30, last, shows an increase in the stock held by females of 254 shares of the par value of \$19,337.50, and in the stock of Massachusetts holders of 106 shares of the par value of \$27,650.

The assertion, frequently made, that the stock of gas companies is held almost entirely by a few capitalists, does not appear to be sustained in the case of most of the companies in this Commonwealth.

The capitalization of the companies making coal gas varies from \$2,948 to \$25,000 per mile of main, from \$2.19 to \$24.78 per thousand feet of gas sold, and from \$22.56 to \$150 per ton of coal carbonized.

The companies making oil gas show a capitalization varying from \$1,179 to \$9,202 per mile of main, and from \$1.59 to \$36.31 per thousand feet of gas sold.

BOOKS AND ACCOUNTS.

Chapter 346 of the Acts of 1886 (see Appendix) provides that, “Commencing on the first day of July, 1886, every company engaged in the manufacture and sale of gas shall keep its books and accounts in a form prescribed by the Board of Gas Commissioners.” This act did not become a law until the last day in June, but the Board having previously devised a form which seemed to be desirable, at once adopted the same as that to be used by the companies, which were immediately notified and furnished with full printed instructions regarding its details. Some of the companies did not receive notice of the form prescribed until after the date on which the statute required its adoption, and were, therefore, unable to begin to use the system at the time specified. (A copy of the instructions is given in the Appendix.)

The form of book-keeping prescribed was similar to that in use by many of the companies, and these, therefore, were put to but little inconvenience in its adoption; while those whose financial accounts had been deficient, either in details or method, were furnished with a system easily comprehended, by which their accounts may be complete and uniform with those of other companies.

In addition to many other advantages, this uniformity will secure far greater accuracy in statements of the companies' business for a specified term, a more reliable comparison of those from different companies, greater ease and promptness in the preparation of the annual returns, and greatly improved facilities for the examination at any time of a company's affairs.

Some companies had not been accustomed to consider the expenses of the year to consist of the materials used, the labor performed and other items of expense *incurred*, and the income for the year to be the value of the actual products of manufacture, whether sold or not, but had regarded the money *paid* during the year for materials, labor, etc., as the expenses of the year, and the sums *collected* as the income.

While the custom referred to might, taking a series of years together, answer the purposes of a body of stockholders not usually very exacting so long as the business appears prosperous, it did not seem to meet the requirements of State supervision, nor furnish to the managers of companies where such custom prevailed a proper basis for a comparison of the results of their labor with those of similar companies.

It was scarcely to be supposed that the radical change required in the custom of some of the companies (especially those in which a single book showing the cash receipts and expenditures covered the extent of its financial accounts) would be acceded to without more or less complaint. The complaints were usually on the ground of the labor involved or expense incurred for such labor. Doubtless the short notice given to the companies, and the fact that by the change in the statutes two returns had been required within a period of six months, influenced some of the complaints. As far as these were directed against the system prescribed, they were not reasonable. The system is so simple as to be readily understood by an ordinary book-keeper, and quite as simple as any corporation would be justified in using. The additional expense which it may involve cannot be large in any case, and in most companies — as the work will be done by the persons already employed — no extra expense will be required.

From the large companies, which usually employ skilled accountants, there has been but little complaint; and notwithstanding the fact that accountants are, as a rule, not inclined to indorse new forms, that class of companies was the first to adopt any changes required to make their accounts conform to the plan prescribed.

In the case of those companies from which the most complaints have come, the Commissioners have endeavored to procure a due consideration by the companies of the system and its advantages, and, by personal explanations, suggestions and assistance to the proper officers, to secure their compliance with the requirements of the Board, believing that such compliance would be more readily obtained by conciliatory action than by arbitrary demand.

ANNUAL RETURNS.

The law provides that the annual return required from companies shall be for the year ending the thirtieth day of June, and be made to this Board on or before the second Wednesday of September in each year, the return for the current year to include the period from July 1, 1885, to June 30, 1886, inclusive.

The period to be covered by the return of the present year was fixed at the suggestion of the representatives of a number of companies who appeared before the legislative committee at the hearing given on the subject. In the case of those companies whose books had been closed on the thirtieth day of June, 1885, it required but little more labor to make the return for a full year than would have been needed to prepare it for the half year following Dec. 31, 1885, the date of the previous return; but those companies accustomed to close their books at times other than June 30 found it quite inconvenient, and in some cases impossible, to ascertain from the business of two or more periods, according as the accounts stood divided on their books, facts required to embody a correct statement for the six months ending Dec. 31, 1885 (already included in the return for the year ending that date), with the business of the following half year.

Owing to the late date on which the act mentioned was enacted, it was not possible to prepare blanks for the returns until after the time to which the accounts were to be made up. Blanks were forwarded, however, to all the companies on the fifteenth day of July, but, owing no doubt in part to the unavoidable delay, only twenty-eight companies submitted their returns as soon as required by statute. In some cases frequent requests were necessary to secure the returns, and two companies neglected to make them until the Attorney-General, at the instance of the Board, requested compliance with the statute. The form of blank is shown in the Appendix.

The time between the date on which the books of the companies are required to be closed and that on which the returns are to be made is ample, with the system of book-keeping

now in use, for any company to prepare its return, and it is not probable that delays will occur in the future; but if such should prove to be the case, it may be requisite to provide that delinquent companies shall — as is the case now with railroad companies — be subject to a penalty for non-compliance with the provisions of the statute.

In view of the previous lack of uniformity in book-keeping and the inability of some companies to give the facts for a portion of the period required to be covered by the return, while still others were able to do so only approximately, it was thought best not to give, with this report, a detailed statement of the income and expenses of each company, as such a statement would, in many instances, do the companies injustice, and, at the same time, give consumers erroneous ideas regarding the profits or losses of the companies.

As an illustration, one company returned in the statement of expenses the cost of coal as \$8,566, whereas other portions of the return showed the value of coals actually carbonized to be about \$11,350, — the difference in amounts arising, as was ascertained upon inquiry, by including in the item of expense merely the sums *paid* for coals during the year. Had this return been published as rendered, the cost of the company's gas in the holder would have appeared to be about 10 cents a thousand less than the actual cost. Another company made no charge for coal carbonized, for the reason that none had been *purchased* during the year, the quantity on hand at the beginning being sufficient for the requirements of the company during the year.

Many of the companies have included in their statements of income the sums received from actual *sales* of residual products, whether such sums were more or less than the value of residuals *produced* during the year, and, consequently, such returns would not correctly represent the business of the year. The form of book-keeping now required and a slight change in the phraseology of the blank on which the returns are made will, it is thought, obviate this objection in the future.

The returns, after receipt of explanations from the officers of some companies and the transfer of amounts not stated in the proper places, no doubt represent, as well as could have been expected under the existing circumstances, the approxi-

mate business of the companies, and from the returns so explained and modified the statistics herewith given are compiled.

In the future it may be deemed wise to give the returns of the companies more in detail, but under the existing circumstances the Board feels that it has done all that is proper, by adhering to the letter of the law and publishing "Abstracts of the returns" to accompany this report.

The aggregate receipts of the sixty-three companies from their gas business only, have been as follows, viz. : —

For gas sold by meter, 2,091,210,980 cubic feet, . . .	\$3,590,669 42
For gas furnished to public lamps, estimated consumption 248,471,195 cubic feet,	432,085 90
For gas sold under contracts, estimated amount 9,697,100 cubic feet,	14,968 51
From residual products,	341,020 76
" rent of meters,	1,444 46
" " gas stoves and engines,	1,750 20
" public lamps other than gas lamps,	8,806 01
" other sources,	1,078 24
Total,	<u>\$4,391,823 50</u>

The expenses have been as follows : —

1. Coals,	\$1,072,394 21
2. Enrichers,	95,857 10
3. Purifying materials,	36,210 73
4. Water,	18,497 18
5. Wages at works,	557,590 62
6. Repairs and maintenance of works (including renewal of retorts),	186,418 02
7. Apparatus and machinery,	78,095 20
8. Wages of meter-takers, clerical labor in distribution, and salary or commission of collectors,	81,237 15
9. Repairs, renewals and maintenance of mains and service pipes,	130,537 98
10. Repairs and renewals of meters,	42,241 42
11. Lighting and repairing (gas lamps only),	17,605 32
12. Lighting and repairing, and materials used for, other lamps,	6,714 52
13. Directors' allowances,	1,545 15
14. Salaries of officers,	80,979 38
15. General salaries,	114,119 09
16. Rent of offices,	7,850 01
17. General office expenses,	36,984 43

18. Taxes,	\$220,596 06
19. Fire insurance,	31,626 57
20. Law expenses,	7,375 23
21. Claims,	10,947 11
22. Bad debts,	8,223 00
23. Incidental expenses,	53,100 44
Total expenses,	<u>\$2,896,745 92</u>
Leaving an apparent net profit on their gas business of	\$1,495,077 58
They have also received for interest,	30,493 14
" rents, etc.,	22,945 87
Making a total of	<u>\$1,548,456 59</u>

From the receipts were paid : —

Interest on bonds and loans,	\$26,696 46
Dividends,	998,573 00
Other items,	4,499 35
	<u>\$1,024,768 81</u>
Leaving a surplus of	523,687 78

Two of the companies appear not to have earned expenses, and seven others have not earned sufficient to warrant the payment of any dividend on their capital stock.

Twelve companies have made charges for depreciation, amounting in the aggregate to	\$285,778 98
Two companies have charged to surplus account for new construction and extension of works,	24,219 58
Five companies have added to their reserved and contingent funds,	98,677 50
	<u>\$408,676 06</u>

One company has increased the estimated value of its real estate and street mains, by vote of its stockholders, and credited the amount to profit and loss account,	\$16,100 00
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The balance sheets of the several companies in operation on the thirtieth day of June last* give in the aggregate the following results, viz. : —

ASSETS.

Real estate, machinery, street mains and meters,	\$12,389,932 24
Cash on hand,	676,568 33
Due for gas,	408,900 04

* Not including the Citizens' Steam and Gas Light Company of Lynn or the Cottage City Gas Company, from which no balance sheets were received.

Other accounts due,	\$92,561 88
Materials, etc.,	379,117 40
Notes receivable,	381,840 56
Investments,	332,038 45
Total,	<u>\$14,660,958 90</u>

LIABILITIES.

Capital stock,	\$11,507,150 00
Bonds,*	224,700 00
Notes payable,	223,110 00
Unpaid bills,	74,156 16
Unpaid dividends,	62,307 50
Deposits,	7,220 10
Interest due and unpaid,	1,534 52
Other items,	14,928 79
	<u>\$12,115,107 07</u>
Reserved and depreciation funds,	743,884 74
	<u>\$12,858,991 81</u>
Surplus,	1,801,967 09
	<u>\$14,660,958 90</u>

Of the sixty-one organized companies in operation, fifty-three show an aggregate surplus of \$1,902,217.69, while eight show an aggregate deficit of \$109,250.60, leaving the total net surplus as shown by the balance sheets of \$1,801,967.09, which, if added to the amount of reserves carried in the balance sheets as liabilities, \$743,884.74, would show an actual surplus of \$2,545,851.83, equivalent to about 22 per cent. on the capital stock of the companies.

While some companies make considerable extensions of pipes or enlargement of works, and pay therefor from undivided profits, and others have from time to time charged off more or less for depreciation, the less prosperous companies have charged the full cost of their works to construction account and made little or no allowance on their books for depreciation in value.

From this fact the apparent surplus, as stated above, does not accurately represent the condition of the companies, as, by the different methods pursued by the different companies, the value of the property of some is far beyond that indicated on their books, while that of others is considerably less.

* Including \$68,100 dividend scrip of the North Attleborough Company.

For the same reason this value of their property is in some companies much larger than their capitalization, while in others it is either just equal to it or considerably less.

The valuation of all the works as assessed for local taxation was \$12,189,768, the local taxes amounting to \$174,621.64.

Details of valuation are shown in the following table : —

NAME OF COMPANY.	ASSESSED VALUE OF PROPERTY.			
	Real Estate.	Machinery	Other Property.	Total.
Adams,	\$1,900	\$10,000	\$1,000	\$12,900
Amesbury,	—	1,000	—	1,000
Amherst,	950	9,050	—	10,000
Arlington,	—	—	—	42,900
Attleborough,	5,500	6,000	—	11,500
Bay State,	76,000	—	—	76,000
Beverly,	8,750	7,000	—	15,750
Boston,	—	—	—	4,124,900
Brockton,	36,300	30,000	—	66,300
Brookline,	154,800	160,000	—	314,800
Cambridge,	313,600	418,100	—	731,700
Charlestown,	251,300	275,000	—	526,300
Chelsea,	111,400	150,000	—	261,400
Chicopee,	—	—	—	28,000
Citizens' (Lynn),	—	—	—	20,000
Citizens' (Quincy),	6,300	7,050	—	13,350
Citizens' (Wakefield),*	—	—	—	22,000
Clinton,	15,000	10,000	—	25,000
Cottage City,	5,000	—	—	5,000
Danvers,	1,950	2,000	—	3,950
Dedham,	—	—	—	34,950
Dorchester,	151,200	147,000	—	298,200
East Boston,	—	—	—	81,400
Easthampton,	9,500	20,000	—	29,500
Fall River,	68,900	—	90,000	158,900
Fitchburg,	33,000	27,950	—	60,950
Gloucester,	26,600	32,000	—	58,600
Great Barrington,	—	—	—	1,200
Greenfield,	16,000	3,500	—	19,500
Haverhill,	22,200	75,000	—	97,200
Ipswich,	3,400	2,000	—	5,400
Jamaica Plain,	76,500	98,000	—	174,500

* Assessed in Wakefield only.

NAME OF COMPANY.	ASSESSED VALUE OF PROPERTY.			
	Real Estate.	Machinery.	Other Property.	Total.
Lawrence,	—	—	—	\$376,000
Leominster,	—	—	—	23,000
Lexington,	\$1,500	—	—	1,500
Lowell,	389,825	\$355,000	\$55,175	800,000
Lynn,	73,900	30,000	—	103,900
Malden,	—	—	—	120,500
Manufacturers' (Fall River), .	—	—	—	47,900
Marblehead,	4,100	8,300	—	12,400
Marlborough,	4,700	6,000	—	10,700
Milford,	13,200	25,000	38,438	76,638
Miller's River (Athol),	—	—	—	10,000
Mutual (Southbridge),	—	—	—	4,400
Nantucket,	2,000	4,000	—	6,000
Natick,	7,200	5,000	—	12,200
New Bedford,	100,000	160,000	—	260,000
Newburyport,	14,000	9,000	17,000	40,000
Newton,	104,230	43,000	115,000	262,230
North Adams,	7,500	5,000	100	12,600
Northampton,	—	—	—	51,000
North Attleborough,	38,000	16,000	—	54,000
Norwood,	—	—	—	8,000
Pittsfield,	24,500	40,000	—	64,500
Plymouth,	4,250	10,000	—	14,250
Roxbury,	342,900	—	260,000	602,900
Salem,	121,000	145,000	16,000	282,000
South Boston,	241,800	150,000	—	391,800
Springfield,	91,200	231,000	—	322,200
Taunton,	6,400	36,000	22,000	64,400
Waltham,	18,000	123,500	—	141,500
Westfield,	14,400	30,000	—	44,400
Woburn,	11,000	34,100	—	45,100
Worcester,	121,200	335,000	—	456,200
Chicopee Falls,	—	—	—	10,000
Holyoke,	—	—	—	100,000
Ware,	—	—	—	10,600
Webster,	7,500	—	—	7,500
Lee,	—	—	—	1,500
Middleborough,	—	—	—	5,800
	—	—	—	\$12,189,768

The total sum paid by the companies for taxes, including State inspection, was \$220,948.23, an average of $9\frac{4}{10}$ cents per thousand feet of gas sold.

The amount paid by each company was as follows:—

Adams,	\$317 18	Malden,	\$2,319 14
Amesbury, . . .	28 11	Manufacturers' (Fall	
Amherst,	143 36	River),	922 15
Arlington, . . .	633 79	Marblehead, . . .	299 22
Attleborough, . .	205 28	Marlborough, . . .	269 42
Bay State, . . .	*	Milford,	1,146 82
Beverly,	206 91	Miller's River (Athol),	157 62
Boston,	62,979 63	Mutual (Southbridge),	64 67
Brockton,	633 29	Nantucket,	112 95
Brookline, . . .	4,187 38	Natick,	368 84
Cambridge, . . .	15,811 92	New Bedford, . . .	5,089 50
Charlestown, . . .	8,510 58	Newburyport, . . .	1,139 15
Chelsea,	5,238 37	Newton,	3,506 55
Chicopee,	448 26	North Adams, . . .	514 35
Citizens' (Lynn), .	*	Northampton, . . .	646 99
Citizens' (Quincy), .	478 68	North Attleborough, .	820 42
Citizens' (Wakefield),	508 11	Norwood,	*
Clinton,	579 00	Pittsfield,	1,471 64
Cottage City, . . .	*	Plymouth,	291 58
Danvers,	62 67	Roxbury,	13,581 60
Dedham,	690 49	Salem,	5,557 46
Dorchester, . . .	5,083 29	South Boston, . . .	5,448 96
East Boston, . . .	3,895 81	Springfield,	7,684 35
Easthampton, . . .	401 70	Taunton,	1,482 24
Fall River, . . .	5,064 85	Waltham,	2,081 45
Fitchburg,	1,286 32	Westfield,	746 85
Gloucester, . . .	1,249 82	Woburn,	861 80
Great Barrington, .	21 25	Worcester,	12,455 41
Greenfield,	731 03	Chicopee Falls, . . .	128 00
Haverhill,	2,133 20	Holyoke,	*
Ipswich,	88 04	Ware,	116 69
Jamaica Plain, . . .	3,677 85	Webster,	107 48
Lawrence,	8,427 84	Lee,	32 45
Leominster,	484 09	Middleborough, . . .	90 86
Lexington,	34 48		
Lowell,	12,949 07	Total,	\$220,948 23
Lynn,	4,239 97		

* No tax returned.

DIVIDENDS.

The dividends declared during the year by the several gas companies were as follows:—

	NAME OF COMPANY.	CAPITAL.	Rate per cent.	Amount of Dividend.
1	Adams,	\$17,300	¹ 20	\$3,185
2	Amesbury,	1,250	16	² 200
3	Amherst,	10,000	8	800
4	Arlington,	70,000	6	4,200
5	Attleborough,	23,200	8	1,856
6	Beverly, { ordinary stock,	40,000	³ —	—
	{ special stock,	11,800	6	708
7	Boston,	2,500,000	10	250,000
8	Brockton,	64,000	10	6,400
9	Brookline,	350,000	6	21,000
10	Cambridge,	700,000	10	70,000
11	Charlestown,	500,000	10	50,000
12	Chelsea,	300,000	6	18,000
13	Chicopee,	30,000	15	4,500
14	Citizens' (Lynn),	125,000	³ —	—
15	Citizens' (Quincy),	33,000	³ —	—
16	Citizens' (Wakefield),	95,300	4	3,812
17	Clinton,	35,000	10	3,500
18	Cottage City,	60,000	³ —	—
19	Danvers,	20,000	³ —	—
20	Dedham,	100,000	² ₁	2,500
21	Dorchester,	400,000	6	24,000
22	East Boston,	220,000	8	17,600
23	Easthampton,	30,000	10	3,000
24	Fall River,	288,000	8	23,040
25	Fitchburg,	60,000	10	6,000
26	Gloucester,	62,300	⁴ ₈	4,984
27	Great Barrington,	5,000	³ —	—
28	Greenfield,	50,000	7	3,500
29	Haverhill,	75,000	10	7,500
30	Ipswich,	16,000	³ —	—
31	Jamaica Plain,	200,000	8	16,000
32	Lawrence,	400,000	8	32,000
33	Leominster,	50,000	⁴ ₁	2,250
34	Lexington,	20,000	³ —	—
35	Lowell,	500,000	12	60,000
36	Lynn,	300,000	5	15,000
37	Malden,	170,000	6	10,200
38	Manufacturers' (Fall River),	50,000	10	5,000

¹ In addition to the dividends, manufacturing concerns owning stock in the company were allowed a rebate of \$1.24 a thousand feet on gas used by them. One stockholder receives gas free of charge, and is not paid a dividend on the stock (55 shares) held by her.

² Cash assets divided preliminary to a sale of a majority of the stock.

³ No dividend declared.

⁴ An additional dividend of 4 per cent. was declared from earnings of wharf property.

	NAME OF COMPANY.	CAPITAL.	Rate per cent.	Amount of Dividend.
39	Marblehead,	40,000	5½	2,200
40	Marlborough,	50,000	6	3,000
41	Milford,	72,300	7	5,061
42	Miller's River (Athol),	40,000	1 -	-
43	Mutual (Southbridge),	15,000	8	1,200
44	Nantucket,	36,000	5	1,800
45	Natick,	20,000	6	1,200
46	New Bedford,	225,000	9	20,250
47	Newburyport,	80,000	6	4,800
48	Newton,	200,000	8	16,000
49	North Adams,	50,000	8	4,000
50	Northampton,	50,000	² 36	18,000
51	Norwood,	12,000	1 -	-
52	North Attleborough,	68,100	³ 10	6,810
53	Pittsfield,	62,500	12	7,500
54	Plymouth,	40,000	7	2,800
55	Roxbury,	600,000	10	60,000
56	Salem,	300,000	6	18,000
57	South Boston,	440,000	6	26,400
58	Springfield,	500,000	10	50,000
59	Taunton,	80,000	10	8,000
60	Waltham,	130,000	6	7,800
61	Westfield,	54,000	9	4,860
62	Woburn,	45,100	7	3,157
63	Worcester,	500,000	10	50,000
		-	-	\$993,573

In addition to the cash dividends paid by the North Attleborough Company, holders of stock on the 20th day of January last were paid a dividend of sixty-eight thousand one hundred dollars (equal to 100 per cent. on the stock) in scrip, dated Feb. 1, 1886, payable in ten years, with interest at the rate of six per cent. per annum, the company reserving the right to anticipate the payment thereof, or redeem the same, at the option of the company, in legal currency of the United States or in stock of the company at par.

The Board is informed by the directors of the company that the scrip was issued "for the purpose of covering construction account." In the return made by the company for the year ending Dec. 31, 1885, no balance-sheet was given, for the reason that no ledger had been kept. The certificate of condition, sworn to by the president, treasurer

¹ No dividend declared.

² Quarterly dividends of 4 per cent. and a special dividend of 20 per cent

³ An additional scrip dividend.

and a majority of the directors, filed with the Secretary of the Commonwealth, as required by chap. 106, P. S., showed the assets at the date of the previous annual meeting, Dec. 21, 1885, to be as follows:—

Real estate and machinery,	\$50,000 00
Cash and debts receivable,	17,659 67
Merchandise, materials, etc.,	3,000 00
Total,	<u>\$70,659 67</u>
The liabilities were given as: — Capital Stock,	68,100 00
Surplus,	<u>\$2,559 67</u>

This company was organized in 1855, but does not appear to have kept any ledger until within a few weeks. The Board was shown a book, purporting to show the cost of construction, from which it appeared that up to Dec. 31, 1880, the cost was \$87,803.66, and up to the present time, \$121,083.49. This account was made up, however, within the past five or six years by the present superintendent, from such memoranda and other sources of information as he was able to obtain; but in the absence of any ledger accounts it is not possible, without very extended research, to ascertain if items may not have been included which should have been charged to renewals, repairs or depreciation of works.

An examination of the records of the company shows that of the present capital of \$68,100, only \$45,500 was paid into the treasury in cash; the remainder, \$22,600, having been added in October, 1878, to redeem the same amount of interest-bearing scrip, issued in 1873 as a dividend, the vote authorizing this dividend setting forth that more than \$25,000 had been expended from undivided profits in the enlargement and extension of works.

The first dividend made by the company appears to have been one of three per cent., paid in 1857, and excepting in the years 1861, 1873 and 1874, dividends have been declared every year, ranging from three to ten per cent. annually, and averaging $6\frac{1}{10}\frac{3}{10}$ per cent. for the twenty-six years.

If any of the original shareholders have retained their holdings up to the present time, and the last list of stock-

holders shows several of the same names that stood on the original list, they will have received, on each hundred dollars invested, dividends as follows, viz. : —

Cash dividends from 1857 to 1878, inclusive, 102 per cent.,	\$102 00
New stock issued in 1878 at par, to redeem scrip dividend of 1873,	50 00
Interest on said scrip for five years at 7 per cent., 35 per cent. on \$50,	17 50
Cash dividends since 1878 on stock as increased by issue of that year, $62\frac{1}{2}$ per cent. on \$150,	93 75
In all,	<u>\$263 25</u>

An average of $8\frac{49}{100}$ per cent. per annum for each of the thirty-one years since the original capital was paid in, not including the scrip dividend of 100 per cent., declared in January last.

It is claimed that the large undivided profits belonged to the stockholders, and that they were entitled to have something to show therefor; but as the holders of 210 (out of a total of 681) shares have disposed of their stock since Dec. 31, 1880, at which time the book referred to shows about \$20,000 to have accumulated, such holders do not share in the division made by the recent issue of scrip.

By a statute adopted in 1868, it is provided that “no gas light company chartered under the laws of this Commonwealth shall declare any stock dividend, or divide the proceeds of the sale of stock among its stockholders, nor create any additional new stock or issue certificates thereof to any person whatever, unless the par value of the shares so issued is first paid in in cash to its treasurer;” and in a statute passed in 1873 it is provided that “when a gas company increases its capital stock the new shares shall be sold and disposed of at public auction for the benefit of the corporation.”

It will not be possible for the company to redeem the recent issue of scrip in stock at par, as was done (apparently in violation of statute) with the previous issue; and there seems only one of two courses left, — either to redeem the scrip out of future earnings, or to allow it to remain a perpetual debt of the company.

The action of the company in issuing this scrip seems clearly to be an evasion of the letter of the statute against stock dividends, and such an open violation of its spirit as to call for emphatic disapproval and some new legislation which may prevent its repetition.

PRICE OF GAS IN THIS COMMONWEALTH.

Between the 31st of December, 1885, the date of the previous return from the companies, and the 30th of June, 1886, reductions in price were made by the following companies, viz. : —

Beverly, April 1.
Brookline, April 1.
Chelsea, April 1.
Chicopee.
Dedham, May 1.
Dorchester, April 1.
East Boston, April 1.
Fitchburg, Jan.
Jamaica Plain, Jan. 1.
Lawrence,* April 1.
Lowell, March 1.
Malden, April 1.
Marblehead, April 1.
Mutual (Southbridge), Feb. 1.
Newton, April.
Northampton, April.
Plymouth, April 1.
Springfield, April 1.
Westfield, April 1.
Worcester, Jan. 1.
Holyoke, May 1.

During the same period the company at Great Barrington increased the price.

The following pages show the price charged by the several companies June 30, 1886, the average candle power as shown by the tests made by the State Inspector of Gas and Gas Meters and reported to this Board, and the average price received for gas sold by meter during the year. Except where noted, the companies manufacture coal gas.

* Reduction of special rate of \$1.40 to \$1.30.

NAME OF COMPANY.	Average Candle Power.	Gross Price.	REMARKS.	Average Price re- ceived for Gas for year ending June 30, 1886.
Adams,	17.43	\$3 00	20 per cent. discount if paid at the office within five days from date of bill,	\$2 46
Arlington,	16.80	3 00	. . . . .	3 00
Attleborough,	16.60	2 25	. . . . .	2 25
Beverly,	17.83	3 00	Discount 10 per cent. on 1,000 feet and 20 per cent. on 10,000 feet burned in one quarter and paid within ten days from presentation of bill.	2 86
Boston,	18.77	1 50	5 per cent. is allowed to consumers whose bills are over \$1,000 per annum, if paid promptly.	1 48
Brockton,	16.88	2 25	1,000 cubic feet and less, \$2.25; 1,000 to 5,000 cubic feet, \$2.10; 5,000 cubic feet and upwards, \$2.	2 16
Brookline,	17.82	2 20	. . . . .	2 42
Cambridge,	17.32	2 00	25 cents per M allowed if paid within 25 days,	1 73
Charlestown,	17.71	1 75	Discount to large consumers in a few cases,	1 73
Chelsea,	18.64	2 20	\$2 net per M to parties using over \$300 worth of gas per annum,	2 37
Citizens' (Quincy),	16.27	3 00	Discount given when more than 5,000 feet per month are used from one meter,	1 26
Citizens' (Wakefield),	16.37	3 50	5 per cent. discount on bills amounting to \$2,000 per annum,	3 38
Chicopee,	16.67	2 75	50 cents discount for payment within ten days; largest consumers, \$2,	2 28
Clinton,	17.98	2 50	By special contract to large consumers, a discount of 50 cents per 1,000 feet,	2 12
Danvers,	16.20	3 50	3 per cent. discount to houses and stores; 10 per cent. to factories,	3 09
Dedham,	16.80	3 25	Discount of 50 cents per M if paid before 16th of month; large consumers' price, \$2.50 per M; if more than 1,000,000 feet used in year, \$2.25.	2 77
Dorchester,	17.54	2 70	50 cents per thousand feet is allowed on bills paid within ten days after they are rendered,	2 48
East Boston,	17.70	1 85	. . . . .	1 96
Easthampton,	17.67	3 00	To manufacturing companies using largest quantities the price is \$2.50 per 1,000 feet,	2 79
Fall River,	17.26	2 00	\$1.75 and \$1.50 are the prices to large consumers,	1 84
Fitchburg,	17.48	2 00	Some contracts for a gross sum per year,	2 17
Gloucester,	17.65	2 50	10 per cent. discount if bills are paid on or before the 15th day of the month in which they are rendered, \$2.25 net. ²	2 24
Greenfield,	17.53	2 75	Discounts on bills of \$15 per month, 5 per cent.; on bills of \$40 per month, 12½ per cent.,	2 66
Haverhill,	18.07	1 80	Discount of 20 cents per 1,000 feet if paid at the office on or before the 10th of each month,	1 68
Jamaica Plain,	17.10	3 25	Discount of \$1 per thousand feet if paid within 15 days; city public buildings, 5 per cent. off net price.	2 40

Lawrence,	18 39	1 70	10 cents off for cash; between 250,000 and 800,000 feet a year, price \$1.60, less 10 cents; over 800,000 feet a year, \$1.30 net.	1 48
Lowell,	17 72	1 60	30 cents per M allowed for prompt payment on all bills paid on or before the fifth business day of each month.	1 38
Lynn, ³	18 23	2 20	20 cents a thousand feet deducted if bills are paid within ten days of date of bill; \$1.50 to engines. ⁴	2 00
Malden,	17 50	2 50	Discount 25 cents per thousand feet if bill is paid by 20th of month in which presented, .	2 33
Manufacturers' (Fall River),	17 43	2 00	\$1.75 to mills. To town and factories \$1, and for gas engines \$1.50, discount, .	1 78
Marblehead,	17 37	3 50	Discount 50 cents per M feet.	2 90
Marlborough,	17 93	3 00	5 per cent. discount to large consumers,	2 83
Milford,	16 50	2 00	5 per cent. off on all bills exceeding \$50 per month,	1 96
Miller's River (Athol), ⁵	22 70	3 00	50 cents per 1,000 cubic feet discount if paid on or before the 20th of the month, also 5 per cent. from net price to small mills, etc., and 10 per cent. to large mills, etc.	2 45
Nantucket,	18 30	3 00	5 per cent. discount if paid by the 15th of the first month in each quarter.	3 00
Natick,	17 03	3 00	Discount 10 per cent. if bill is paid within five days; to consumers of 12,500 feet per quarter	2 80
New Bedford,	17 52	2 00	15 per cent., of 25,000 feet per quarter 20 per cent., and of 100,000 feet per quarter 25 per cent. ⁵	1 71
Newburyport,	17 07	3 00	For prompt payment, to general consumers 50 cents per M discount; to city and large consumers 75 cents per M. ⁷	2 43
Newton,	17 84	2 25	Consumption of 100,000 feet \$2.10, of 200,000 feet \$2, of 300,000 feet \$1.90, of 500,000 feet \$1.75.	2 31
North Adams,	17 53	2 25	\$2.15 and \$1.95, ⁸	2 10
Northampton,	18 33	2 25	Discount to consumers of more than 1,000 feet and less than 25,000 feet a month, 5 per cent.; to consumers of more than 25,000 feet a month, 10 per cent.	2 39
North Attleborough,	17 08	3 00	Discount of 50 cents a thousand feet if paid before the 16th of the month,	2 63
Norwood,	19 40	3 00	Discount of 30 cents per M if bills are paid within 15 days from date,	2 64
Pittsfield,	19 20	2 50	Less than 1,000 feet per month 10 per cent., over 1,000 feet and less than 50,000 feet 20 per cent., over 50,000 feet 25 per cent.	2 08
Plymouth,	16 60	2 50	Special prices to large consumers,	2 33
Roxbury,	18 31	1 75	Allowed city of Boston 5 per cent. on gas registered by meters,	1 75
Salem,	18 41	2 50	Discount 50 cents per M if bill is paid in 15 days; on bills of \$250 and over, a quarter, discount of 60 cents.	2 01

¹ Includes sales to public lamps. ² After July 1, 1886, 20 per cent. discount = \$2 net. ³ Coal gas and water gas. ⁴ After Oct. 1, 1886, \$1.80 net. ⁵ Water gas.

⁶ After Oct. 1, 1886, \$2, with discount of 10 per cent. for payment within five days, and 25 per cent. to consumers of 4,000 feet a month and over, if paid promptly.

⁷ After Oct. 1, 1886, \$2.50, with 10 per cent. discount to general consumers and 20 per cent. to large consumers, for prompt payment.

⁸ After Oct. 1, 1886, \$1.85 to manufacturers.

NAME OF COMPANY.	Average Candle Power.	Gross Price.	REMARKS.	Average Price re- ceived for Gas sold by Meter for year ending June 30, 1886.
South Boston,	18.18	\$2 20	Discount of 20 cents a thousand feet if bill is paid on or before the 18th.	\$1 97
Springfield,	18.19	2 00	Discounts, 10 per cent. on bills over \$150 a quarter, 5 per cent. on bills less than \$150, for prompt payment.	2 08
Taunton,	18.02	1 75	Over 125,000 feet per quarter \$1 50, ¹	1 47
Waltham,	18.46	2 50	Discount of 50 cents per M for payment by 15th of month,	1 81
Westfield,	17.30	2 50	Discount of 5 per cent. if bills are paid within five days, and 10 per cent. if the bills of the year amount to 50,000 cubic feet.	2 74
Woburn,	18.23	2 20	20 cents discount if paid on or before the 15th of the month in which bills are due,	2 04
Worcester, ²	17.94	2 25	20 per cent. is allowed on all bills paid on or before the 15th of each month,	1 92
Holyoke,	17.49	2 25	\$2. Discount 5 per cent. if paid within 5 days from date of presentation of bill,	2 10
Ware,	17.65	3 00	Public institutions, \$2,	2 94
Webster,	18.95	4 00	10 per cent. allowed on bills of 500 to 1,900 feet, 20 per cent. allowed on bills of 2,000 feet and over.	3 53
Amesbury, ³	424.15	3 25	Discounts: If bill amounts to \$5 per month, 5 per cent.; to \$10, 10 per cent.; to \$20, 15 per cent.; to \$50, 20 per cent.; to \$75, 25 per cent. Gas bills to be paid on or before the 10th of the month to secure the discount.	3 25
Amherst, ³	538.55	6 00		5 60
Great Barrington, ³	724.85	4 85	Special rate to one very large consumer,	3 55
Ipswich, ³	826.30	5 00	Discount 10 per cent. if 10,000 feet are used in one month,	3 56
Leominster, ³	927.40	5 00	Discount 10 per cent. A few customers who use large quantities are allowed a special rate,	5 00
Lexington, ³	1027.50	6 00	5 per cent. on all gas consumed over 2,000 feet per month for mechanical purposes and hotel,	5 40
Mutual (Southbridge), ³	1126.20	3 00	Large consumers \$4,	3 31
Chicopee Falls, ³	1229.95	5 00	Special rate to one very large consumer,	4 62
Lec. ³	1352.50	7 50		7 50
Middleborough, ³	1425.60	4 50		4 33

¹ After Oct. 1, 1886, \$1.65, and to consumers of over 125,000 feet per quarter, \$1.45. The average price given is obtained from the figures in the return; probably incorrect.

² Coal gas and water gas.

³ Oil gas.

⁴ Thirty-three and one-third per cent. of air.

⁵ Includes sales to public lamps.

⁶ Amount of air not given.

⁷ Twenty-five per cent. of air.

⁸ About 50 per cent. of air.

⁹ About 30 per cent. of air.

¹⁰ About 33½ per cent. of air.

¹¹ Thirty to forty per cent. of air.

¹² About 30 per cent. of air.

¹³ Pure gas, no air.

¹⁴ About 30 per cent. of air.

The average price paid by consumers throughout the Commonwealth was for coal gas, \$1.72½; for oil gas, \$4.41 per thousand feet.

In the preceding table the Citizens' Steam and Gas Light Company of Lynn is omitted. This company makes non-illuminating gas, and the superintendent reports, "The small business we have been doing has been more of an experimental nature than anything else." From the return made by the company small quantities of its gas appear to have been sold,—a part at forty cents and a part at fifty cents a thousand feet.

The custom which prevails with some companies of making a large discount for prompt payment not only secures ready settlement of the bills, but saves the salary of a collector, which in some instances is quite an item of expense.

The price given in the tables covers, in nearly all the companies, the entire cost to the consumer of the gas burned, inasmuch as in but fifteen companies is any charge made for meter rent, and in only four of these is the charge made, except when the amount used is quite small. It is now provided by statute that "no rent shall be charged for use of meter when the consumer uses gas to the value of seven dollars in any one year."

The custom which prevails in this Commonwealth of not making a charge for rent of meters is in marked contrast with that prevailing in Great Britain and Ireland, where, of 363 organized companies, only five furnish meters free of charge; in nine, the meters are furnished by consumers, and in the remainder a rental is charged, usually based upon the size of the meter and varying in different companies from 1s. 8d. for a two-light meter, to £8 8s. for a 1,000-light meter; in the case of about twenty companies the rent is fixed at from 7½ to 16 per cent. on the cost of the meter. Of 158 works belonging to local authorities, in eighteen no charge is made for rent, in ten the meters are furnished by consumers, and in the other 130 a charge is made similar to that prevailing in the chartered companies.

The amounts received form quite a large item of income, the largest London company receiving for the year ending

June 30, last, nearly £49,000, or about $\frac{48}{100}$ of one per cent. on its capital.

In this State the companies generally have no such source of income to apply towards the payment of dividends.

In the eighty-nine localities supplied by the sixty-nine works in operation on the thirtieth day of June last there were 84,479 meters in use and 20,083 public lamps.

The total quantity of gas supplied by meters as shown in the returns of the sixty-three companies engaged exclusively in the manufacture and sale of gas was 2,091,210,980 cubic feet, — an average of 25,143 feet to each meter, and of 3,347 feet to each burner represented by the nominal capacity of the meters.

If the value of the gas thus supplied be apportioned to the number of meters in use, and each meter considered as representing a distinct consumer, it will give the amount of \$43.17 as the average income from each.

The amount of gas made, sold by meter, supplied to public lamps, and unaccounted for, is shown in the following tables : —

Coal-Gas Companies.

NAME OF COMPANY.	Gas Made.	Gas Sold by Meter.	Gas Sold for Public Lamps.	Gas Used at Works and Offices.	Gas not Accounted for.	Percentage of Gas Unaccounted for.
	Feet.	Feet.	Feet.	Feet.	Feet.	
Adams,	5,775,000	4,847,660	500,000	15,000	412,340	7.14
Arlington,	7,253,300	4,813,400	592,000	91,800	1,726,100	23.79
Attleborough,	5,448,500	4,474,400	—	80,000	894,100	16.41
Beverly,	5,668,380	3,666,000	432,000	—	1,570,380	27.70
Boston,	1,106,999,700	978,848,300	57,173,200	1 —	70,678,200	6.38
Brockton,	15,163,000	11,174,300	644,320	342,800	3,101,580	20.45
Brook line,	45,350,600	26,043,700	11,771,229	420,900	7,114,771	15.68
Cambridge,	104,427,900	81,162,874	10,739,284	982,100	11,543,692	11.05
Charlestown,	75,909,000	49,359,939	17,000,376	849,706	8,698,919	11.45
Chelsea,	31,242,000	20,670,560	4,101,750	426,400	6,043,290	19.31
Chicopee,	6,986,600	5,457,000	360,560	56,000	1,113,040	15.93
Citizens' (Quincy),	5,050,000	3,214,300	1,157,300	300,000	348,400	6.90
Citizens' (Wakefield),	5,141,000	3,702,000	286,000	120,000	1,033,000	20.09
Clinton,	8,655,810	6,205,242	648,240	87,600	1,714,798	19.81
Danvers, ²	861,700	505,000	70,000	—	289,700	33.53
Dedham,	7,962,100	4,874,000	899,100	196,000	1,993,000	25.03
Dorchester,	45,709,100	22,370,600	17,624,677	301,800	5,412,023	11.84
East Boston,	32,925,000	18,665,400	12,065,271	204,700	1,989,679	6.04
Easthampton,	4,818,700	3,857,000	190,000	25,000	746,700	15.49
Fall River,	44,397,600	35,141,100	3,153,167	317,700	5,785,633	13.03
Fitchburg,	12,122,100	9,760,200	713,800	390,000	1,258,100	10.37

¹ Included in "Gas not accounted for."² For six months from Jan. 1 to June 30. Public lamps for four months only.

Coal-Gas Companies. — Concluded.

NAME OF COMPANY.	Gas Made.	Gas Sold by Meter.	Gas Sold for Public Lamps.	Gas Used at Works and Offices.	Gas not Accounted for.	Percentage of Gas Unaccounted for.
	Feet.	Feet.	Feet.	Feet.	Feet.	
Gloucester,	10,208,000	8,364,800	741,109	95,000	1,007,091	9.86
Greenfield,	5,882,000	3,821,400	267,725	85,800	1,707,075	29.02
Haverhill,	36,010,000	31,546,100	2,686,000	200,000	1,578,000	4.38
Jamaica Plain,	28,127,200	13,991,600	8,732,779	500,000	4,902,821	17.43
Lawrence,	71,224,800	61,827,764	838,248	589,875	7,968,913	11.18
Lowell,	163,799,000	144,936,300	7,109,700	1,725,700	10,027,300	6.12
Lynn,	46,829,500	36,136,800	2,241,900	657,100	7,737,000	16.60
Malden,	25,716,700	19,085,700	2,964,900	260,000	3,405,200	13.63
Manufacturers' (Fall River),	11,085,100	8,746,700	912,400	126,300	1,299,700	11.72
Marblehead,	3,832,500	2,948,094	320,188	143,600	420,818	10.98
Marlborough,	4,288,000	3,177,200	295,555	125,300	689,945	16.09
Millford,	6,976,360	5,984,100	569,000	42,000	381,260	5.47
Miller's River (Athol), ²	1,174,500	699,500	325,000	50,000	100,000	8.51
Nantucket,	2,447,210	1,661,640	426,000	43,000	316,570	12.93
Natick,	2,999,800	2,587,000	129,600	95,000	188,200	6.27
New Bedford,	43,608,300	32,383,500	7,100,000	350,000	3,774,800	8.65
Newburyport,	8,612,424	6,405,800	1,129,250	200,000	830,374	9.64
Newton,	39,399,900	28,063,395	6,244,000	386,000	4,106,505	10.42
North Adams,	13,739,100	10,318,200	1,551,000	365,000	1,504,900	10.95
Northampton,	9,442,100	7,960,577	366,644	60,000	1,054,879	11.17
North Attleborough,	11,764,622	9,371,400	778,600	178,100	1,436,322	12.29
Norwood,	8	484,200	—	—	—	—
Pittsfield,	14,276,000	10,825,500	1,800,000	210,000	1,440,500	10.09
Plymouth,	3,907,220	3,243,000	364,674	108,600	190,946	4.88
Roxbury,	123,846,000	96,259,000	30,660,390	642,350	6,284,260	4.69
Salem,	42,111,000	32,390,500	4,312,437	272,000	5,136,063	12.19
South Boston,	65,768,929	38,000,200	12,079,243	336,000	5,293,486	9.49
Springfield,	61,506,000	52,938,200	3,583,000	615,800	4,309,000	6.99
Taunton,	25,396,000	22,604,400	1,100,000	556,800	1,134,800	4.46

Waltham,	21,256,800	18,747,500	1,398,800	193,100	917,400	4.31
Westfield,	5,519,300	4,274,950	519,520	55,000	669,830	12.13
Woburn,	6,525,000	5,199,400	597,989	156,700	570,911	8.74
Worcester,	81,807,700	69,443,000	5,138,100	795,200	6,431,400	7.86
Holyoke,	41,231,000	43,021,000	391,000	460,800	4,357,200	15.03
Ware,	4,171,750	3,480,100	184,627	76,200	430,823	10.32
Webster,	2,150,760	1,079,100	200,900	68,500	802,260	37.30

Oil-Gas Companies.

Amesbury,	⁷ 888,130	769,275	16,000	—	102,855	11.58
Amherst,	710,000	670,000	40,000	—	—	—
Great Barrington,	⁷ 705,260	639,800	—	—	65,460	9.28
Ipswich,	⁸ —	1,331,200	—	—	—	—
Leominster,	1,652,475	1,072,600	304,270	25,000	250,605	15.16
Lexington,	730,000	530,000	200,000	—	—	—
Mutual (Southbridge),	1,367,755	1,028,000	192,000	—	147,755	10.80
Chicopee Falls,	1,608,763	⁹ 374,210	¹⁰ —	—	—	—
Lee,	⁶ —	¹¹ —	—	—	—	—
Middleborough,	1,002,725	806,650	13,000	—	123,075	12.27

¹ Claimed to have been increased by an unusual leak in a street main.

² Water gas. Estimated quantities for six months from Jan. 1 to June 30.

³ Quantities not given.

⁴ Includes 874,000 feet used in the mills of the company.

⁵ Includes 2,166,400 feet used in the mills of the company.

⁶ Includes 341,000 feet used in the mills of the company.

⁷ Quantity of gas bought.

⁸ No station meter.

⁹ Quantity of gas used in mills of the company not known.

¹⁰ Amount not known.

¹¹ Meters register dollars and cents, not cubic feet.

The following tables show the capacity of the works per day, the total quantity of gas sold, the capital (including bonds) per thousand feet sold, and the average price received for *all* gas sold:—

Coal-Gas Companies.

NAME OF COMPANY.	Capacity of Works per day.	Total Sales of Gas.	Capital per M sold, including Bonds.	Average Price re- ceived per M for Gas sold.
	Feet.	Feet.		
Adams,	50,000	5,347,660	\$3.23	\$2.46
Arlington,	50,000	5,435,400	12.88	3.01
Attleborough,	100,000	4,474,400	5.18	2.25
Beverly,	35,000	4,098,000	12.64	2.84
Boston,	6,000,000	1,036,321,500	2.41	1.47
Brockton,	80,000	11,718,620	8.45	2.12
Brookline,	400,000	37,814,929	9.26	2.38
Cambridge,	1,000,000	91,902,108	7.62	1.72
Charlestown,	500,000	66,360,375	7.53	1.71
Chelsea,	250,000	24,772,310	12.11	2.31
Chicopee,	75,000	5,817,560	5.16	2.39
Citizens' (Quincy),	60,000	4,401,600	10.56	2.46
Citizens' (Wakefield),	50,000	3,988,000	23.90	3.39
Clinton,	90,000	6,853,482	5.11	2.18
Danvers,	35,000	1,575,000	—	3.01
Dedham,	75,000	5,773,100	17.32	3.00
Dorchester,	300,000	39,995,277	10.00	2.27
East Boston,	250,000	30,730,621	7.16	1.91
Easthampton,	40,000	4,047,000	7.41	2.80
Fall River,	500,000	38,294,267	7.52	1.83
Fitchburg,	160,000	10,474,000	5.73	2.14
Gloucester,	125,000	9,105,909	6.84	2.24
Greenfield,	24,000	4,089,125	12.23	2.65
Haverhill,	200,000	34,232,100	2.19	1.68
Jamaica Plain,	200,000	22,724,379	8.80	2.25
Lawrence,	1,000,000	62,666,012	6.38	1.48
Lowell,	1,000,000	152,046,000	3.29	1.38
Lynn,	500,000	38,398,700	7.81	2.00
Malden,	200,000	22,050,600	9.98	2.31
Manufacturers' (Fall River),	² —	9,659,100	5.18	1.77
Marblehead,	25,000	3,268,282	10.44	2.88
Marlborough,	40,000	3,472,755	14.40	2.75
Milford,	35,000	6,553,100	11.03	2.02
Miller's River (Athol),	75,000	³ 1,124,500	—	1.90
Nantucket,	28,000	2,087,640	17.24	2.82
Natick,	35,000	2,716,600	7.64	2.91
New Bedford,	300,000	39,483,500	5.70	1.69
Newburyport,	100,000	7,535,050	10.62	2.29

¹ For six months, from January 1 to June 30, including public lamps for four months.

² Not returned.

³ Estimated for six months, from January 1 to June 30.

Coal-Gas Companies — Concluded.

NAME OF COMPANY.	Capacity of Works per day.	Total Sales of Gas.	Capital per M sold, including Bonds.	Average Price re- ceived per M for Gas sold.
	Feet.	Feet.		
Newton,	250,000	34,907,395	\$6.44	\$2.36
North Adams,	130,000	11,869,200	4.21	2.01
Northampton,	75,000	8,327,221	6.00	2.39
North Attleborough,	100,000	10,150,000	¹ 6.71	2.56
Norwood,	20,000	484,200	24.78	2.65
Pittsfield,	90,000	12,625,500	4.95	2.01
Plymouth,	20,000	3,607,674	11.09	2.51
Roxbury,	500,000	126,919,390	4.28	1.72
Salem,	250,000	36,702,937	8.17	2.00
South Boston,	425,000	50,139,443	8.78	1.91
Springfield,	500,000	56,641,200	8.83	2.09
Taunton,	140,000	23,704,400	3.37	1.48
Waltham,	200,000	20,146,300	7.44	1.92
Westfield,	40,000	4,794,470	11.26	2.69
Woburn,	80,000	5,797,389	7.77	2.15
Worcester,	750,000	74,581,100	6.70	1.92
Holyoke,	400,000	35,538,600	—	² 2.11
Ware,	50,000	1,498,527	—	² 2.91
Webster,	30,000	1,939,000	—	² 3.60

Oil-Gas Companies.

Amesbury,	³ —	785,275	\$1.59	\$3.25
Amherst,	5,000	710,000	14.08	5.60
Great Barrington,	³ —	639,800	7.81	3.55
Ipswich,	⁴ —	1,331,200	16.98	3.56
Leominster,	30,000	1,376,870	36.31	5.00
Lexington,	20,000	730,000	27.40	4.98
Mutual (Southbridge),	18,000	1,220,000	12.29	3.26
Chicopee Falls,	⁴ —	⁵ 374,210	—	4.62
Lee,	⁴ —	⁶ —	—	7.50
Middleborough,	5,000	879,650	—	4.32

¹ If the scrip dividend recently issued be included, the capital per thousand feet will be \$13.418.

² Average price charged for gas sold to the public.

³ No gas made; bought and distributed.

⁴ Not returned.

⁵ Sales to private consumers only. Public lamps omitted.

⁶ Meters register dollars and cents, not cubic feet.

The following tables show the capital, the gas sold, the gas unaccounted for, and the number of consumers per mile of main, also the gas sold per consumer and per meter light:—

Coal-Gas Companies.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Con- sumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unac- counted for.	Number of Con- sumers.		
		Feet.	Feet.		Feet.	Feet.
Adams,	- ¹	-	-	-	32,754	3,236
Arlington,	\$3,444	267,490	84,945	15.9	14,498	2,120
Attleborough,	6,666	1,285,752	256,925	49.1	26,166	4,955
Beverly,	6,802	696,938	267,070	54.0	11,528	2,440
Boston,	19,816	8,214,832	560,226	207.0	37,475	3,837
Brockton,	4,705	861,663	228,057	46.4	17,737	2,887
Brookline,	7,273	785,846	147,854	26.0	20,752	2,886
Cambridge,	9,040	1,186,905	149,085	57.5	18,206	3,312
Charlestown,	13,213	1,753,709	229,886	89.8	14,517	2,992
Chelsea,	6,788	560,586	136,300	30.3	15,414	3,097
Chicopee,	8,498	1,648,034	315,308	42.2	36,691	2,598
Citizens' (Quincy),	4,714	628,800	49,785	34.7	13,351	4,450
Citizens' (Wakefield),	4,765	199,400	51,650	15.0	12,299	1,539
Clinton,	7,042	1,378,970	345,117	33.6	38,980	1,941
Danvers,	7,547	-	-	32.8	-	-
Dedham,	8,665	500,268	172,703	23.2	18,149	2,624
Dorchester,	8,680	867,951	117,231	35.6	13,607	2,851
East Boston,	11,727	1,637,026	106,060	62.1	16,008	3,786
Easthampton,	8,241	1,111,813	205,137	48.0	22,040	2,057
Fall River,	16,991	2,259,248	341,335	53.7	38,616	2,708
Fitchburg,	5,681	991,856	119,138	45.1	20,461	2,655
Gloucester,	13,311	1,992,715	184,310	104.0	17,176	3,935
Greenfield,	13,020	1,064,876	444,550	62.2	15,989	3,772
Haverhill,	5,188	2,706,094	124,743	112.4	22,168	3,826
Jamaica Plain,	9,514	1,081,083	236,245	42.7	15,580	2,521
Lawrence,	15,503	2,467,675	309,066	81.5	29,385	4,398
Lowell,	7,684	2,336,652	154,100	90.6	24,565	3,152
Lynn,	14,171	1,813,826	367,203	73.1	23,342	4,010
Malden,	3,777	490,013	75,671	25.3	16,610	2,699
Manufacturers' (Fall River),	11,111	2,146,466	288,833	37.1	49,416	1,828
Marblehead,	12,945	1,057,692	136,187	70.2	13,585	1,728
Marlborough,	25,000	1,736,377	344,972	67.3	20,491	2,440
Milford,	10,695	969,393	56,400	58.5	15,150	2,440
Miller's River (Athol),	16,260	-	-	47.9	-	-
Nantucket,	7,422	430,441	65,272	40.6	8,434	2,144
Natick,	5,830	792,011	54,574	52.1	14,372	1,713
New Bedford,	8,886	1,559,370	149,083	77.9	16,623	3,109
Newburyport,	11,428	1,076,435	118,625	57.4	15,934	2,497
Newton,	3,618	631,579	74,117	28.9	17,937	3,071
North Adams,	5,512	1,308,621	165,920	40.5	28,038	3,844
Northampton,	5,919	985,470	128,836	42.1	22,361	3,399
North Attleborough,	8,407	1,253,085	177,348	40.9	28,227	3,467
Norwood,	2,948	118,968	-	7.1	16,696	1,723
Pittsfield,	8,434	1,715,991	194,400	77.0	18,958	4,891
Plymouth,	13,333	1,202,558	63,648	66.6	16,215	2,617
Roxbury,	9,103	1,925,646	95,346	81.7	17,872	3,264
Salem,	12,091	1,479,440	207,016	88.8	14,696	3,156
South Boston,	17,067	1,944,896	205,332	72.8	20,169	5,599

¹ Length of mains not given.

Coal-Gas Companies — Concluded.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Con- sumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unac- counted for.	Number of Con- sumers.		
		Feet.	Feet.		Feet.	Feet.
Springfield, . . .	\$14,982	1,663,989	126,586	76.5	20,321	3,118
Taunton, . . .	5,000	1,481,525	70,925	56.5	24,949	2,952
Waltham, . . .	9,454	1,465,185	66,721	47.7	28,535	3,864
Westfield, . . .	10,581	940,092	131,339	49.0	17,099	3,109
Woburn, . . .	11,275	1,198,617	142,727	87.5	14,855	2,739
Worcester, . . .	16,960	2,530,566	218,161	110.9	21,223	4,196
Holyoke, . . .	—	2,499,653	302,373	70.7	33,866	3,756
Ware, . . .	—	1,923,803	226,748	50.0	36,632	2,628
Webster, . . .	—	512,000	320,904	52.0	8,300	1,860

Oil-Gas Companies.

Amesbury, . . .	\$1,179	740,825	97,033	103.7	6,997	2,473
Amherst, . . .	2,610	175,979	—	25.5	6,203	1,410
Great Barrington, . . .	4,000	511,840	52,368	52.0	9,843	1,843
Ipswich, . . .	6,060	504,242	—	25.7	19,576	1,724
Leominster, . . .	7,692	211,826	38,554	29.8	17,737	1,148
Lexington, . . .	8,810	321,585	—	37.8	6,162	1,545
Mutual (Southbridge), . . .	9,202	748,466	90,647	90.1	6,952	1,296
Chicopee Falls, . . .	—	—	—	59.4	—	—
Lee, . . .	¹ —	—	—	—	² —	—
Middleborough, . . .	—	293,216	41,025	30.0	9,629	1,695

¹ Length of mains not given.² Quantity of gas sold not given.

The following table shows the tons of coal carbonized and the kind and quantity of enricher used by the various coal-gas companies :—

NAME OF COMPANY.	Tons of Coal Carbonized.	Enricher Used.	Cannel. Tons.	Naphtha. Gallons.	Residuum. Barrels.	Oil. Gallons.
Adams,	624	-	-	-	-	-
Arlington,	730	-	-	-	-	-
Attleborough,	518	-	-	-	-	-
Beverly,	714	-	-	-	-	-
Boston,	100,755	Cannel, albertite, naphtha, gas oil, .	781½	675,802	-	20,396
Brookton,	1,416	-	-	-	-	-
Brookline,	3,888	Cannel, oil,	132½	-	-	12,610
Cambridge,	8,760	Gas oil,	-	-	-	31,536
Charlestown,	6,714½	Naphtha,	-	28,304	-	-
Chelsea,	3,221	Gas oil,	-	-	-	11,509
Chicopee,	577	Cannel,	50	-	-	-
Citizens' (Quincy),	441	Naphtha,	-	6,250	-	-
Citizens' (Wakefield),	642	-	-	-	-	-
Clinton,	755	Oil,	-	-	-	1,861
Danvers,	1,151	-	-	-	-	-
Dedham,	760	Residuum,	-	-	28	-
Dorchester,	4,026½	Cannel screenings, gas oil, .	162	-	-	5,772
East Boston,	3,364	Cannel, residuum,	64½	-	21	-
Easthampton,	449	Cannel, residuum,	1	-	8½	-
Fall River,	4,143	-	-	-	-	-
Fitchburg,	1,056	Naphtha,	-	3,695	-	-
Gloucester,	947	Cannel, gas oil,	15	-	-	475
Greenfield,	612	Cannel,	2	-	-	-
Haverhill,	3,323	-	-	-	-	-
Jamaica Plain,	2,588	Cannel, fine,	60	-	-	-
Lawrence,	5,983	Cannel, naphtha,	277	7,796	-	-
Lowell,	15,171	Naphtha,	-	40,856	-	-

Lynn, . . .	3,863	Naphtha,	.	.	.	2,988 ²	-	-	-
Malden, . . .	2,218 ¹ ₂	Naphtha,	.	.	.	6,840	-	-	-
Manufacturers' (Fall River),	1,060	Cannel,	.	.	.	-	20	-	-
Marblehead, . . .	385	Naphtha,	.	.	.	385	-	-	-
Marlborough, . . .	462	Naphtha,	.	.	.	6,200	-	-	-
Milford, . . .	757	Cannel,	.	.	.	-	10	-	-
Nantucket, . . .	240	-	-	-	-	-	-	-	-
Natick, . . .	303	Gas oil,	.	.	.	-	-	-	450
New Bedford, . . .	4,029	Cannel, naphtha,	.	.	.	5,514	48	-	-
Newburyport, . . .	860	Cannel, oil,	.	.	.	-	22	-	-
Newton, . . .	3,320	Gas oil,	.	.	.	-	-	-	-
North Adams, . . .	1,200	Cannel, naphtha,	.	.	.	6,632	10	-	-
Northampton, . . .	814 ¹ ₂	Cannel, naphtha, residuum,	.	.	.	493	68 ³ ₄	12	-
North Attleborough, . . .	1,068	Naphtha,	.	.	.	1,674	-	-	-
Norwood, . . .	125	-	-	-	-	-	-	-	-
Pittsfield, . . .	900	Cannel, residuum,	.	.	.	-	150	7	-
Plymouth, . . .	347	Cannel, residuum,	.	.	.	-	21 ¹ ₄	15	-
Roxbury, . . .	12,003	Cannel, naphtha,	.	.	.	6,753	865	-	-
Salem, . . .	3,344	Cannel,	.	.	.	-	299	-	-
South Boston, . . .	5,190	Residuum,	.	.	.	-	-	228	-
Springfield, . . .	5,060	Cannel,	.	.	.	-	375	-	-
Taunton, . . .	2,415	Gas oil,	.	.	.	-	-	-	4,212
Waltham, . . .	1,921	Cannel,	.	.	.	-	-	-	-
Westfield, . . .	450	Cannel,	.	.	.	-	32 ¹ ₂	-	-
Woburn, . . .	626	Cannel,	.	.	.	-	75 ¹ ₂	-	-
Worcester, . . .	6,333	Naphtha,	.	.	.	-	17	-	-
Holyoke, . . .	3,543	Cannel,	.	.	.	51,326 ²	-	-	-
Ware, . . .	391	Cannel,	.	.	.	-	146 ² ₄	-	-
Webster, . . .	245	-	-	-	-	-	21	-	-

¹ For six months to June 30, 1883.² Not including amount used in manufacture of water gas.

The following tables show the materials used in the manufacture of water and oil gas, with the quantity of each used:—

Water Gas.

NAME OF COMPANY.	Material used in Generator.	Quantity used. Tons.	Enricher used.	Quantity used. Gallons.
Lynn,	Coke,	1 -	Naphtha,	20,839
Miller's River (Athol),	Anthracite coal,	2 40	Naphtha,	5,000
Worcester,	Lehigh coal, . .	238	Naphtha,	55,642
	Coke,	3 -	- - -	-

Oil Gas.

NAME OF COMPANY.	Material used.	Quantity used. Gallons.	Fuel used.	Quantity used.
Amesbury, ¹	- - -	-	- - -	-
Amherst,	Naphtha,	11,388	Coke,	2,100 bu.
Great Barrington, ² . .	- - -	-	- - -	-
Ipswich,	Petroleum, . . .	30,000	Franklin coal, . .	80 tons.
Leominster,	Petroleum, . . .	16,348	Cumberland coal,	76½ "
Lexington,	Petroleum, . . .	11,504	Anthracite, . . .	81½ "
Mutual (Southbridge),	Petroleum, . . .	12,941	Anthracite, . . .	41 "
Chicopee Falls,	Petroleum, . . .	20,817	Anthracite, . . .	63½ "
Lee,	Petroleum, . . .	5,515	Anthracite, . . .	6 -
Middleborough,	Gas oil,	7,486½	Coke,	6 -

¹ One to one and a half bushels per thousand feet used in generator. Coke for generating steam; quantity not given.

² Quantities used for six months to June 30, 1886. Eight tons of coal used also for generating steam during the same period.

³ Quantity of coke used for generating gas not known; about one-sixth bushel of coke per thousand feet used for generating steam.

⁴ Manufactures no gas.

⁵ Quantity not given.

The following table shows the day and night pressures at works : —

Coal Gas.

[Pressure in inches.]

NAME OF COMPANY.	Day.	Night.	NAME OF COMPANY.	Day.	Night.
Adams, . . .	3.0	3.0	Manufacturers' (Fall River), . . .	²	²
Arlington, . . .	2.5	1.5	Marblehead, . . .	1.4	2.2
Attleborough, . . .	2.0	1.5	Marlborough, . . .	1.0	2.0
Beverly, . . .	2.7	2.7	Milford, . . .	2.5	²
Boston, . . .	2.5	2.0	Miller's Riv. (Athol), . . .	2.5	2.5
Brockton, . . .	1.5	2.2	Nantucket, . . .	1.9	1.9
Brookline, . . .	2.0	3.1	Natick, . . .	1.0	1.7
Cambridge, . . .	3.5	2.8	New Bedford, . . .	2.4	1.9
Charlestown, . . .	1.2	¹	Newburyport, . . .	1.3	1.8
Chelsea, . . .	1.5	2.7	Newton, . . .	2.0	2.6
Chicopee, . . .	.9	2.7	North Adams, . . .	2.0	2.0
Citizens' (Quincy), . . .	1.5	2.8	Northampton, . . .	2.2	2.2
Citizens' (Wakefield), . . .	²	²	North Attleborough, . . .	2.0	2.5
Clinton, . . .	1.2	2.5	Norwood, . . .	2.0	2.0
Danvers, . . .	1.5	2.0	Pittsfield, . . .	.6	2.2
Dedham, . . .	1.5	2.7	Plymouth, . . .	1.9	1.9
Dorchester, . . .	2.0	2.7	Roxbury, . . .	2.6	2.6
East Boston, . . .	1.5	2.2	Salem, . . .	2.0	2.5
Easthampton, . . .	2.5	2.5	South Boston, . . .	1.8	2.8
Fall River, . . .	4.5	3.5	Springfield, . . .	1.3	⁵
Fitchburg, . . .	1.2	2.5	Taunton, . . .	2.6	2.6
Gloucester, . . .	2.0	2.5	Waltham, . . .	1.2	⁶
Greenfield, . . .	³	2.2	Westfield, . . .	1.2	1.9
Haverhill, . . .	1.5	⁴	Woburn, . . .	2.5	2.0
Jamaica Plain, . . .	1.2	2.5	Worcester, . . .	1.5	2.8
Lawrence, . . .	2.4	2.7	Holyoke, . . .	2.0	2.5
Lowell, . . .	1.6	2.2	Ware, . . .	1.3	2.7
Lynn, . . .	1.0	2.8	Webster, . . .	2.5	2.5
Malden, . . .	2.0	3.5			

Oil Gas.

Amesbury, . . .	²	²	Lexington, . . .	1.5	1.5
Amherst, . . .	²	²	Mutual (Sothbridge), . . .	²	.9
Great Barrington, . . .	²	²	Chicopee Falls, . . .	1.5	1.5
Ipswich, . . .	1.0	1.0	Lee, . . .	²	²
Leominster, . . .	1.7	1.4	Middleborough, . . .	1.2	1.2

¹ From 1.5 to 3.1.² Not returned.² From 1.0 to 1.5.⁴ From 3.0 to 4.0.⁵ Minimum, 2.7; maximum, 3.5.⁶ From 2.5 to 3.0.

The following table shows the number of retorts, the average number of the same employed in winter and in summer, and the average number of men employed in winter and in summer : —

Coal Gas Works.

NAME OF COMPANY.	No. of Retorts.	AVERAGE NO. OF RETORTS EMPLOYED.		AVERAGE NO. OF MEN EMPLOYED.	
		Winter.	Summer.	Winter.	Summer.
Adams,	10	10	5	3	2
Arlington,	11	8	5	4	3
Attleborough,	13	4	4	3	3
Beverly,	8	8	6	4	3
Boston,	784	489	198	483	392
Brockton,	18	10	8	5	5
Brookline,	48	21 $\frac{1}{2}$	15	11 $\frac{1}{3}$	10 $\frac{1}{2}$
Cambridge,	72	48	28	25	16
Charlestown,	72	36 $\frac{4}{10}$	22 $\frac{9}{10}$	19	16
Chelsea,	30	15	10	9	7
Chicopee,	16	8	3	4	2
Citizens' (Quincy),	7	6	2 $\frac{1}{2}$	3	3
Citizens' (Wakefield),	12	6	3	5	4
Clinton,	18	13	5	4	2
Danvers,	4	2	1	1	1
Dedham,	15	10	5	3	2
Dorchester,	58	34 $\frac{1}{3}$	22	26	28
East Boston,	45	22	12	10	6
Easthampton,	9	6	3	2 $\frac{1}{2}$	2
Fall River,	105	37	16	19 $\frac{1}{2}$	10
Fitchburg,	20	10	5	6	4
Gloucester,	15	6	3	5	5
Greenfield,	6	6	3	3	2
Haverhill,	30	24	18	11	9
Jamaica Plain,	24	18	11	10	10
Lawrence,	137	40	24	25	19
Lowell,	144	96	48	111	90
Lynn,	48	21	15	11	8
Malden,	24	15	10	8	8
Manufacturers' (Fall River),	21	15	3	6	2
Marblehead,	9	3	3	3	3
Marlborough,	11	8	3	3	2
Milford,	17	11	5	5	4
Nantucket,	7	3	4	3	3
Natick,	7	3	3	2	2
New Bedford,	42	28	18	13	10
Newburyport,	12	6	3	4	3
Newton,	84	18	12	12	8
North Adams,	19	13	6	5	3
Northampton,	13	11 $\frac{1}{3}$	7 $\frac{2}{3}$	5	4
North Attleborough,	17	5 $\frac{3}{10}$	3 $\frac{3}{4}$	6	5
Norwood,	6	3 $\frac{1}{2}$	3	3	3
Pittsfield,	17	6 $\frac{1}{2}$	5 $\frac{1}{2}$	3	2
Plymouth,	5	3	2	2	2
Roxbury,	145	81	51	39	28
Salem,	55	31	17 $\frac{6}{7}$	13 $\frac{9}{10}$	9 $\frac{1}{3}$
South Boston,	108	35 $\frac{1}{2}$	24 $\frac{1}{2}$	26 $\frac{3}{10}$	24 $\frac{1}{3}$
Springfield,	72	30	17	17	13
Taunton,	35	25	15	13	9

Coal Gas Works — Concluded.

NAME OF COMPANY.	No. of Retorts.	AVERAGE NO. OF RETORTS EMPLOYED.		AVERAGE NO. OF MEN EMPLOYED.	
		Winter.	Summer.	Winter.	Summer.
Waltham,	31	12	7	6	4
Westfield,	9	6	3	3	3
Woburn,	12	6	3	4	2
Worcester,	48	31½	15½	22	10
Holyoke,	36	22	15	13	10½
Ware,	7	2	1	4	2
Webster,	6	3	3	2	1

Oil Gas Works.

Amesbury, ¹	—	—	—	—	—
Amherst,	12	—	—	1	1
Great Barrington, ¹	—	—	—	—	—
Ipswich,	6	—	—	1	1
Leominster,	3	—	—	1	1
Lexington,	4	—	—	1	1
Mutual (Southbridge),	6	—	—	1	1
Chicopee Falls,	12	—	—	1½	1
Lee,	6	—	—	2	—
Middleborough,	3	—	—	3	—

In oil-gas works only part of the retorts are used at any one time, and those only as the demand for gas requires.

STREET MAINS.

Many of the companies appear not to have made any record of their mains when the same were laid down and are therefore now not able to give a correct detailed statement of sizes and lengths. Since the details regarding mains have been called for, some companies have caused plans of their works to be prepared, gaining thereby information valuable for many purposes of their own and for making returns.

It is expected that, hereafter, companies will make records of all extensions; and if those companies which are now without plans of existing mains shall from time to time, as such mains are exposed for any purpose, cause measurements and records thereof to be made, it will be but a short time before complete plans can be made, with but little if any expense to the company.

The lengths and sizes of mains as returned by the companies are shown by the following table: —

¹ Gas bought, not made.² Not returned.³ One man part of the time.

NAME OF COMPANY.	DIAMETER IN INCHES.											Total Length In Feet.	Total Length, Miles and Feet.
	1	1 1/4	1 1/2	2	3	4	6	8	10	12	16		
Adams.	-	-	-	-	-	-	-	-	-	-	-	-	1
Amesbury.	-	-	-	4,500	-	-	-	-	-	-	-	-	6,600
Amherst.	-	-	1,800	8,775	0,681	-	-	-	-	-	-	-	20,250
Arlington.	-	-	-	-	95,000	2,000	9,300	-	-	-	-	-	100,500
Attleborough.	-	900	-	2,000	3,000	9,000	3,600	-	-	-	-	-	38,400
Beverly.	-	-	-	9,530	15,440	6,550	201,759	550	-	-	-	-	31,070
Boston.	-	-	-	2,391	108,074	90,924	10,980	21,084	28,046	65,003	-	-	600,134
Brookton.	-	-	-	-	48,085	10,020	13,200	450	4,900	1,120	-	-	71,855
Brookline.	-	-	-	5,200	113,034	61,045	33,786	10,000	4,900	1,120	-	-	3,215
Cambridge.	0,220	12,232	4,631	-	-	-	-	-	-	-	-	-	638
Charlestown.	-	-	-	12,083	131,841	21,980	15,105	5,772	2,023	5,631	-	-	254,078
Chelsea.	-	-	-	5,280	95,040	52,800	26,400	62,800	1,000	-	-	-	408,830
Chicago.	-	-	2,640	6,480	6,280	2,640	-	-	-	-	-	-	100,830
Citizens' (Lynn).	-	-	-	-	-	1,200	8,250	8,073	1,023	-	-	-	233,320
Citizens' (Quincy).	-	-	-	-	-	-	-	-	-	-	-	-	18,680
Citizens' (Wakfield).	-	-	-	-	-	-	-	-	-	-	-	-	1,405
Clinton.	-	-	-	-	-	-	-	-	-	-	-	-	8 20
Daughters.	-	-	1,375	1,300	12,100	5,025	5,850	-	-	-	-	-	5,120
Dedham.	-	-	2,403	7,223	3,760	3,760	657	-	-	-	-	-	3,476
Dorchester.	-	-	3,000	6,800	23,706	8,069	18,081	-	-	-	-	-	2,846
East Boston.	-	-	-	-	-	-	-	-	-	-	-	-	243,348
Easthampton.	600	-	-	-	-	-	-	-	-	-	-	-	99,000
Fall River.	-	-	-	8,490	2,500	7,100	500	20,540	1,500	2,200	-	-	10,240
Fitchburg.	-	-	-	4,000	24,835	4,185	30,240	3,700	200	-	-	-	80,512
Gloucester.	-	-	-	4,000	40,300	3,000	4,000	3,700	200	-	-	-	55,800
Great Barrington.	-	-	-	1,320	17,021	5,500	1,200	1,000	-	-	-	-	24,721
Greenfield.	-	-	-	1,320	1,320	3,800	-	-	-	-	-	-	6,000
Greenhill.	-	-	-	5,016	9,821	2,640	2,640	200	-	-	-	-	20,317
Haverhill.	-	-	-	7,220	36,800	4,800	13,082	1,025	-	-	-	-	60,827
Ipswich.	2,000	-	-	10,000	950	3,000	1,000	4,575	375	9,083	-	-	14,050
Jamaica Plain.	-	-	975	7,125	70,575	20,100	7,275	4,575	375	-	-	-	111,000
Lawrence.	-	-	-	-	89,350	5,804	23,182	8,112	192	-	-	-	136,236
Leominster.	-	-	-	-	-	1,500	500	-	-	-	-	-	3,300
Lexington.	1,000	1,000	-	7,000	-	-	-	-	-	-	-	-	2,040
Lowell.	-	-	-	-	-	-	-	-	-	-	-	-	4,230
Lynn.	837	2,102	2,375	4,625	35,787	35,785	14,510	3,337	4,502	4,600	-	-	2,040
Malden.	-	-	-	-	126,720	73,920	36,000	-	-	-	-	-	1,440
Manufacturers' (Fall River).	-	-	-	-	-	-	-	-	-	-	-	-	8 45
	-	-	-	-	-	-	-	-	-	-	-	-	2,540

Marblehead,	150	-	-	400	7,500	3,500	4,800	-	-	-	-	16,350	3	510
Marlborough,	-	-	-	3,700	8,500	9,000	13,000	-	-	-	-	-	2	-
Milford,	900	600	-	1,000	4,000	1,000	5,000	-	-	-	-	35,700	6	4,020
Miller's River (Albion),	2,000	-	-	1,000	7,325	-	1,325	-	-	-	-	13,000	2	2,440
Mutual (Southbridge),	-	-	-	-	7,325	-	500	-	-	-	-	8,650	1	3,370
Nantucket,	-	-	-	1,320	5,280	15,840	3,030	-	-	-	-	25,580	4	4,400
Natick,	-	-	-	13,340	13,340	1,770	3,030	-	-	-	-	18,140	3	2,300
New Bedford,	1,600	795	4,293	86,655	15,495	17,800	16,388	5,289	-	-	3,005	183,720	25	1,720
Newburyport,	-	-	-	-	-	-	-	-	-	-	-	-	67	-
Newton,	-	-	-	17,800	140,730	93,300	17,800	1,200	18,600	2,400	-	291,830	55	1,430
North Adams,	-	-	-	15,840	11,880	13,840	3,860	1,400	400	-	-	47,920	9	400
Northampton,	-	-	2,640	5,280	10,560	23,760	1,000	1,400	-	-	-	44,640	8	2,400
North Attleborough,	-	-	-	5,800	3,500	25,000	6,000	2,500	-	-	-	42,800	8	560
Norwood,	-	-	-	-	-	12,571	8,939	-	-	-	-	21,510	4	390
Norwood,	2,000	-	-	1,100	25,000	5,800	4,750	-	500	-	-	39,150	7	2,190
Pittsfield,	-	-	-	-	-	-	-	-	-	-	-	-	63	-
Plymouth,	-	-	-	-	-	37,312	54,213	2,100	-	1,409	22,213	348,027	65	4,827
Roxbury,	-	-	-	885	20,492	37,320	24,445	919	5,214	3,260	5,738	131,006	24	4,266
Salem,	-	-	-	597	98,942	8,661	21,631	6,800	803	-	4,999	136,160	25	4,160
South Boston,	-	-	-	2,835	9,953	56,634	26,208	2,130	5,507	900	2,600	173,762	34	242
Springfield,	-	-	-	-	-	-	-	-	-	-	-	-	16	-
Taunton,	-	-	-	425	36,891	16,799	12,679	800	1,400	-	-	72,605	13	3,065
Waltham,	-	-	325	3,226	13,455	3,685	2,057	2,100	-	-	-	26,941	5	541
Watfield,	-	-	-	-	5,644	-	-	-	-	-	-	-	64	-
Woburn,	-	-	-	-	-	-	-	-	-	-	-	-	5	-
Worcester,	11,688	1,366	3,458	3,892	73,795	43,659	4,085	6,420	536	3,881	-	155,671	29	2,551
Chicopee Falls,	-	-	-	2,500	2,500	1,500	-	-	-	-	-	5,600	1	320
Holyoke,	-	-	-	4,190	38,015	9,100	11,650	5,150	-	5,825	375	676,120	14	2,200
Lee,	-	-	-	-	-	5,280	-	-	-	-	-	-	1	-
Middleborough,	-	-	-	1,320	7,920	-	1,320	-	-	-	-	15,840	3	-
Ware,	2,221	125	2,359	3,351	-	-	2,006	-	-	-	-	10,062	1	4,782
Webster,	-	-	-	-	7,920	-	6,280	-	-	-	-	13,200	2	2,640
Total,	-	-	-	-	-	-	-	-	-	-	-	-	31,134	1,330

¹ Length of mains not returned.

² Includes 27,854 feet 18-inch, 3,341 feet 24 inch and 17,158 feet 30-inch main.

³ Includes 301 feet 14-inch main.

⁴ Includes 3,980 feet 5-inch main.

⁵ Approximate.

⁶ Includes 1,815 feet 2½ inch main.

METERS.

Of the sixty-six returns made for the year ending Dec. 31, 1885, eighteen did not give the various sizes of meters in use, even some of the larger companies lacking this information. As this was essential in making a comparison of the nature of the business of the various companies, the Board has since requested those companies not in possession of the desired particulars to obtain them, and this has been done in all except three cases; so that with these exceptions it has been possible to prepare the following table. From this it appears that about 636,618 burners, or flames, are represented by the nominal capacity of the meters; but manufacturers of meters claim, and common usage tends to show, that each meter is capable of supplying burners, or flames, to the extent of from 75 to 150 per cent. in excess of its nominal capacity.

NAME OF COMPANY.	NUMBER AND SIZE OF METERS.																			Total Number in use June 30, 1886.			
	1 L't.	2 L't.	3 L't.	5 L't.	10 L't.	20 L't.	30 L't.	35 L't.	40 L't.	45 L't.	50 L't.	60 L't.	80 L't.	100 L't.	125 L't.	150 L't.	180 L't.	200 L't.	250 L't.		300 L't.	400 L't.	500 L't.
Adams,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148
Amesbury,	-	73	15	4	4	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
Amherst,	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	103
Arlington,	-	1	154	98	50	18	5	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	327
Attleborough,	-	57	58	27	12	15	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171
Beverly,	-	11	255	19	16	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	318
Boston,	5	43	9,158	5,880	6,431	2,302	1,046	-	-	28	378	72	82	142	1	50	-	66	6	17	-	-	1,26,120 2,680
Brookline,	-	42	302	125	55	14	8	-	-	5	-	2	2	-	-	-	-	-	-	-	-	-	1,255
Brookline,	-	11	444	448	237	92	9	-	-	-	9	5	11	5	-	6	-	-	-	-	-	-	1,255
Cambridge,	-	93	2,728	1,172	276	96	39	-	-	2	13	5	3	2	-	-	-	-	-	-	-	-	4,458
Charlestown,	-	122	2,311	545	340	31	31	-	-	2	8	-	-	-	-	1	-	2	1	-	-	-	3,400
Chelsea,	-	64	1,042	150	42	19	6	-	-	2	-	-	-	-	-	4	-	-	-	-	-	-	1,341
Chicopee,	-	-	110	12	9	3	1	-	-	-	-	-	-	-	-	3	-	-	1	-	-	-	149
Citizens' (Lynn),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 18
Citizens' (Quincy),	-	99	104	44	24	15	7	-	-	1	2	-	2	2	-	-	-	-	-	-	-	-	3 243
Citizens' (Wakefield),	-	22	61	40	26	12	3	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	301
Clinton,	-	1	43	25	9	3	3	-	-	-	-	-	-	-	-	3	-	-	5	-	-	-	179
Danvers,	-	2	106	54	16	9	1	-	-	1	1	1	1	1	-	-	-	-	-	-	-	-	87
Dorchester,	-	27	684	736	138	43	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	283
East Boston,	-	611	403	73	33	19	8	-	-	2	10	2	2	2	3	-	-	-	-	-	-	-	1,644
East Thompson,	-	5	110	22	13	7	5	-	-	1	2	6	3	3	-	-	-	-	-	-	-	-	1,168
Fall River,	-	-	409	311	107	34	8	-	-	1	6	1	-	-	-	3	-	5	11	11	-	-	175
Fitchburg,	-	-	137	205	28	24	6	-	-	8	-	6	-	-	-	-	-	5	-	-	-	-	910
Gloucester,	-	-	421	50	2	3	4	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	477
Great Barrington,	-	-	39	18	2	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	487
Greenfield,	-	34	165	17	18	2	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	62
Haverhill,	-	126	900	127	68	54	24	-	-	-	12	-	5	7	-	-	-	-	-	-	-	-	239
Ipawitch,	-	3	22	14	20	4	-	-	-	-	3	-	-	2	-	-	1	-	-	-	-	-	68
Jamaica Plain,	-	18	353	329	184	20	5	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	898
Lawrence,	-	753	976	202	58	33	33	-	-	-	15	5	14	22	-	7	-	2	-	-	-	-	2,104
Leominster,	-	2	155	19	6	7	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104
Lexington,	-	76	5	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86
Lowell,	-	1,026	3,385	700	288	121	92	-	-	-	144	1	28	71	-	27	-	8	-	-	-	-	5,900
Lynn,	-	5	1,182	184	92	42	13	-	-	-	15	1	1	13	-	-	-	-	-	-	-	-	1,549
Malden,	-	31	670	406	70	28	8	-	-	-	11	-	3	-	-	-	-	-	-	-	-	-	1,139

1 Three 6-light meters, included in total.

2 Ten meters, also not given, included in total.

3 No details given.

NAME OF COMPANY.	NUMBER AND SIZE OF METERS — Concluded.																			Total Number in use June 30, 1886.			
	1 L't.	2 L't.	3 L't.	5 L't.	10 L't.	20 L't.	30 L't.	35 L't.	40 L't.	45 L't.	50 L't.	60 L't.	80 L't.	100 L't.	125 L't.	150 L't.	180 L't.	200 L't.	250 L't.		300 L't.	400 L't.	500 L't.
Manufacturers' (Fall River),	-	-	125	26	9	2	-	-	-	-	-	-	-	-	2	-	-	-	2	4	3	3	177
Marblehead,	-	8	145	33	9	9	2	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	217
Marlborough,	-	-	63	45	18	19	2	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	155
Milford,	-	34	298	21	17	13	-	-	-	3	2	2	-	-	13	-	-	-	-	-	-	-	395
Miller's River (Athol),	-	-	63	30	20	3	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	118
Mutual (Southbridge),	-	16	67	39	16	8	-	-	-	1	-	-	-	-	8	-	-	-	-	-	-	-	147
Nantucket,	-	-	175	12	3	5	2	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	197
Natick,	-	3	96	36	24	10	-	-	-	-	8	2	1	-	-	-	-	-	-	-	-	-	180
New Bedford,	-	24	1,311	461	123	16	10	-	-	-	4	-	1	9	-	-	-	-	1	-	3	-	1,963
Newburyport,	-	80	305	34	17	11	1	-	-	-	1	-	2	2	-	-	-	-	-	-	-	-	402
Newton,	-	62	784	507	166	49	16	-	-	-	6	1	3	2	-	1	-	2	-	1	-	-	1,598
North Adams,	-	-	288	39	12	7	2	-	-	11	5	-	3	1	2	2	2	1	-	-	-	-	368
Northampton,	-	-	264	66	3	5	8	-	-	-	9	-	-	-	3	2	2	2	-	-	-	-	356
North Attleborough,	-	-	126	107	63	14	11	-	-	-	9	-	-	1	-	-	-	-	-	-	-	-	331
Norwood,	-	-	12	7	6	1	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	29
Pittsfield,	-	-	481	54	22	13	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	571
Plymouth,	-	44	127	12	4	6	1	-	-	3	-	-	-	1	4	-	-	1	-	-	-	-	200
Roxbury,	-	95	2,588	1,824	738	81	22	-	-	3	18	-	9	4	4	-	4	-	-	-	-	-	5,386
Salem,	-	11	1,628	397	87	40	22	-	-	-	10	2	4	3	-	-	-	-	-	-	-	-	2,204
South Boston,	-	142	1,313	297	55	31	23	-	-	-	17	1	1	6	-	-	-	-	1	-	-	-	1,887
Springfield,	-	2	1,829	456	159	70	8	-	-	40	-	6	4	32	-	3	-	-	-	-	-	-	2,604
Taunton,	-	56	499	195	73	24	23	-	-	-	15	1	4	9	2	-	4	-	-	-	-	-	906
Waltham,	-	219	356	35	11	12	4	-	-	-	6	-	-	2	9	-	-	-	5	-	-	-	657
Westfield,	-	16	196	32	7	9	2	-	-	3	7	-	2	-	-	-	-	-	-	-	-	-	267
Woburn,	-	61	202	58	9	6	4	-	-	-	7	2	3	7	11	-	-	-	-	-	-	-	350
Worcester,	-	949	1,680	350	147	69	16	-	-	2	34	3	1	-	-	-	2	2	-	-	-	-	3,272
Chicopee Falls,	-	31	11	12	7	1	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	63
Holyoke,	-	-	833	58	35	29	17	-	-	-	13	5	2	1	6	-	5	1	3	2	-	-	1,020
Lee,	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92	
Middleborough,	-	-	82	3	1	3	1	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	95
Ware,	-	7	35	29	14	3	3	-	-	-	-	-	2	3	-	-	-	2	-	-	-	-	130
Webster,	-	5	95	19	6	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals,	5	5,586	43,394	17,362	10,562	3,670	1,551	1	4	136	806	147	204	432	4	123	1	112	31	48	2	4	84,479

1 Not returned.

Grand total, 84,479 — representing 635,618 lights.

PUBLIC LAMPS.

The following tables give the number of public lamps supplied by the several companies, the amount of gas used in such lamps, and the price per thousand received therefor; also, in the case of those companies which light or otherwise care for the lamps, the expense per thousand for such care.

Compared with the returns for the year ending Dec. 31, 1885, these tables show a decrease of 452 lamps supplied by the coal-gas companies, those supplied by oil-gas companies remaining the same.

Public Lamps—Coal Gas.

NAME OF COMPANY.	No. of Lamps Supplied.	Amount of Gas used in Lamps.	Average Price received per M.	Expense of Lighting and care of Lamps per M.
		Feet.		
Adams,	63	500,000	\$2.5200	\$0.5000
Arlington,	147	592,000	3.0000	—
Attleborough,	1	—	—	—
Beverly,	72	432,000	2.6666	—
Boston,	² 3,500	57,473,200	1.3000	—
Brockton,	60	544,320	1.4789	.0095
Brookline,	788	11,771,229	2.2813	.2073
Cambridge,	² 920	10,739,234	1.6500	—
Charlestown,	1,057	17,000,376	1.6546	.0054
Chelsea,	490	4,101,750	2.0000	—
Chicopee,	73	360,560	3.0959	—
Citizens' (Quincy),	² 100	1,157,300	³	—
Citizens' (Wakefield),	83	286,000	3.5000	—
Clinton,	74	648,240	2.8124	—
Danvers,	⁴ 32	70,000	2.4381	—
Dedham,	191	899,100	4.2820	1.3127
Dorchester,	1,150	17,624,677	2.0000	—
East Boston,	788	12,065,221	1.8500	—
Easthampton,	² 52	190,000	3.0000	—
Fall River,	300	3,153,167	1.7500	—
Fitchburg,	66	713,800	1.7653	—
Gloucester,	109	741,109	2.1845	—
Greenfield,	² 53	267,725	2.5000	—
Haverhill,	315	2,686,000	1.6000	—
Jamaica Plain,	560	8,732,779	2.0000	—
Lawrence,	⁵	838,248	1.4000	—
Lowell,	855	7,109,700	1.3690	—
Lynn,	295	2,241,900	1.9807	.0752
Malden,	425	2,964,900	2.1636	.2383
Manufacturers' (Fall River),	91	912,400	1.7500	—

¹ No lamps supplied.² Approximate.³ Amount received for public lamps not given separately.⁴ No lamps now supplied. This was the number for ten months; the quantity of gas given was the consumption for four months.⁵ No lamps now supplied; the quantity of gas given was the consumption for a portion of the year.

Public Lamps — Coal Gas — Concluded.

NAME OF COMPANY.	No. of Lamps Supplied.	Amount of Gas used in Lamps.	Average Price received per M.	Expense of Lighting and care of Lamps per M.
		Feet.		
Marblehead,	61	320,188	\$2.6966	—
Marlborough,	42	295,555	1.5525	—
Milford,	63	569,000	2.5069	\$0.5518
Miller's River (Athol), ¹	42	325,000	1.2923	.2215
Nantucket,	71	426,000	2.1126	.3803
Natick,	15	129,600	2.9228	—
New Bedford,	440	7,100,000	1.6180	.3654
Newburyport,	150	1,129,250	1.5000	—
Newton,	945	6,244,000	2.6087	.7850
North Adams,	85	1,551,000	1.3700	.3868
Northampton,	87	366,644	2.3750	—
North Attleborough,	80	778,600	1.8054	.8228
Norwood,	2	—	—	—
Pittsfield,	³ 80	1,800,000	1.5442	.3424
Plymouth,	⁴ 50	364,674	2.8153	.6913
Roxbury,	1,845	30,660,390	1.6354	.0053
Salem,	484	4,312,437	1.9000	.0192
South Boston,	⁴ 780	12,079,243	1.7061	—
Springfield,	455	3,683,000	2.0867	—
Taunton,	155	1,100,000	1.5791	—
Waltham,	226	1,398,800	3.4357	.8978
Westfield,	62	519,520	2.2500	—
Woburn,	79	597,989	3.0809	.7021
Worcester,	⁴ 700	5,138,100	1.9122	—
Holyoke,	5	—	—	—
Ware,	65	184,627	2.7501	—
Webster,	31	200,900	3.8576	—
	19,802			

Public Lamps — Oil Gas.

Amesbury,	1	16,000	3.2500	—
Amherst,	25	40,000	—	—
Great Barrington,	2	—	—	—
Ipswich,	2	—	—	—
Leominster,	106	304,270	5.0000	—
Lexington,	85	200,000	4.1600	—
Mutual (Southbridge),	43	192,000	3.0000	—
Chicopee Falls,	18	7	—	—
Lee,	5	—	—	—
Middleborough,	3	13,000	4.0384	—
	281			

¹ For six months, from Jan. 1 to June 30, 1886.² No lamps supplied.³ Before April 1, 1886, 115.⁴ Approximate.⁵ No return made.⁶ Amount received for public lamps not given separately.⁷ Cannot give the amount.

PURITY OF GAS.

The State Inspector of Gas and Gas Meters has continued to furnish the Board with the results of his inspections of the gas of the various companies.

Three inspections were made of the gas of the Marlborough Company, in one of which it was found to be below the legal standard for candle power; of three inspections made at Arlington, one showed the candle power at the exact limit; all other companies at every inspection during the year were found to be furnishing gas the candle power of which was above the standard.

The gas of the Lowell Company has upon six inspections shown an excess of sulphur over the legal limit of twenty grains per 100 cubic feet, the quantities and the dates when found being as follows: April 10, 21.6 grains; August 16, 20.9 grains; October 16, 29.2 grains; November 17, 24.8 grains; December 23, 20.6 grains, and December 30, 22.7 grains, the last two being consecutive inspections. The thirty-one inspections made during the year show an average of 15.21 grains. This company, for the purification of its gas, has used lime and iron oxide, — the latter prepared by itself.

The gas of the Lawrence Company, on an inspection made December 27, showed sulphur to the amount of 20.7 grains. The thirteen inspections previously made during the year gave an average of 13.26 grains. This company has used lime and iron for purification.

All the other companies have kept within the legal limit for sulphur.

An excess of ammonia was found in the gas of several companies; the quantity and date when found, the names of the companies and the total number of inspections made of the gas of each, is shown in the following table:—

NAME OF COMPANY.	AMMONIA.		Total Number of Inspections during the year.
	Grains per 100 Cubic Feet.	Date when found.	
Beverly,	20.0	May 5,	3
Boston,	{ 12.0 11.5	September 9, October 6,	} 53
Brockton,	25.0	April 16,	4
Clinton,	11.1	April 21,	3
East Boston,	11.8	May 6,	7
Easthampton,	15.5	October 5,	3
Gloucester,	11.9	December 8,	4
Greenfield,	13.3	July 30,	2
Haverhill,	10.9	December 30,	7
Nantucket,	58.7	July 8,	2
Northampton,	{ 50.0 26.7	July 2, October 4,	} 3
Plymouth,	16.1	April 16,	3
South Boston,	12.5	June 24,	10
Springfield,	11.9	April 13,	11
Worcester,	{ 11.2 21.7	January 22, February 2,	} 15

The legal limit for ammonia is ten grains.

There would seem to be no sufficient reason why so many companies should have failed to meet the legal requirements regarding ammonia. The gas of the Northampton Company, inspected three times, was found at the first inspection to contain 50 grains, at the second 26.7, and at the last only 3.3, an average for the year of 26.67 grains. The gas of the Nantucket Company, inspected twice, showed upon the first inspection 58.7 grains, and at the other only 4.4, the average, however, being 31.55 grains. Each of these companies shows an *average* amount largely in excess of the legal standard.

With the amount of ammonia limited in Washington to 5 grains per 100 cubic feet, and in the London and Canadian companies to 4 grains, it would seem that, with proper apparatus and due diligence on the part of the managers, all the companies in this Commonwealth might (as the large majority have done) keep within the legal limit of 10 grains.

In the tests for carbonic oxide, a quantity in excess of the legal limit was found in the gas of the Miller's River Company at Athol on three consecutive inspections; in that of the

Cottage City Company on two consecutive inspections; in that of the Worcester Company on one inspection, and in that of the Charlestown Company on one inspection.

The amounts found were as follows:—

Miller's River Company,	26.03	per cent.,	April	22.
	23.06	"	July	30.
	27.42	"	November	18.
Cottage City Company,	17.50	"	July	7.
	23.80	"	November	30.
Worcester Company,	11.00	"	April	29.
Charlestown Company,	14.53	"	November	9.

The legal limit for carbonic oxide is ten per cent.

Sulphuretted hydrogen was found in the gas of the Springfield Company two consecutive times, March 2 and 25, and again May 28. There were twelve inspections made of this gas during the year. This impurity was also found once, December 15, at Adams, where there were three inspections; once, July 30, at North Adams, where there were four; and once, October 4, at Westfield, where two inspections were made.

A comparison of the inspections made in 1886 with those made in 1885 shows the following results:—

	1886.	1885.
Number of inspections made,	426	517
Number of companies subject to inspection,	58	56
Number of companies showing deficiency in candle power,	1	0
Highest candle power, not including ten oil-gas companies,	24.0	26.0
Lowest candle power, not including ten oil-gas companies,	14.7	15.1
Average candle power, not including ten oil-gas companies,	17.76	17.62
Number of companies showing sulphuretted hydrogen,	4	3
Number of companies showing excess of sulphur,	2	0
Number of companies showing excess of ammonia,	15	6
Number of companies showing excess of carbonic oxide,	4	3
Largest amount of sulphur,	29.2	19.1
Smallest amount of sulphur,	2.5	2.8
Average amount of sulphur,	10.42	9.93
Largest amount of ammonia,	58.7	36.4
Smallest amount of ammonia,	1.	1.
Average amount of ammonia,	4.05	3.21

The inspections of the ten oil-gas companies showed : —

	1886.	1885.
Highest candle power,	58.6	61.3
Lowest candle power,	23.0	29 0
Average candle power,	30.35	30.60

Since under the statute no penalty is incurred unless the excess of impurity is found on three consecutive inspections, only the Miller's River Company became liable to a fine.

The large number of instances in which the limits of impurity have been exceeded invites public attention to the inefficiency of the existing law to secure a continuous supply of gas of the legal standard.

WATER GAS.

The Board has given some attention during the year to the question of water gas, the manufacture of which for illuminating purposes is now practically prohibited in this State on account of the excess of carbonic oxide in it, but has not been able to secure sufficient information of a definite and reliable character to warrant it in recommending any change in the existing law.

VIOLATIONS OF LAWS.

In the last report of the Board, mention was made of the fact that the gas of the Miller's River Gas Light Company, at Athol, had been found, upon three consecutive inspections, to contain carbonic oxide in excess of the legal limit, and that notice thereof had been given to the Attorney-General. Action was taken by him against the company, and the fine fixed by law was paid in November last.

From the returns made to the Board by the State Inspector, it appears that, upon three consecutive inspections during the past year, the gas of the same company has again been found to contain carbonic oxide in excess of the legal limit. Notice of this fact has been given to the company and to the Attorney-General, and the Board is assured by the treasurer of the company that, as soon as practicable, the process of manufacturing shall be so changed that the company can comply with the law.

OWNERSHIP OF WORKS.

The Amesbury and Salisbury Gas Light Company has not heretofore manufactured gas, but purchased its supply from the Hamilton Woollen Company. Recently a majority of its stock has changed hands, and the purchaser, Mr. Edward E. Procter of Portland, Me., proposes to have works built, and it is expected that the company will soon be in a position to manufacture for itself.

A controlling interest in the stock of the Fall River Gas Works Company has passed into the hands of persons believed to be interested in the United Gas Improvement Company of Philadelphia, a company engaged in purchasing, leasing and operating gas works in various parts of the United States. This company has also a controlling interest in the South Boston Gas Light Company.

Of the seven directors of the Fall River Company, only two are residents of this Commonwealth; the directors of the South Boston Company are all residents of Boston.

ELECTRIC LIGHT.

This Board has no supervision over the companies furnishing electric light in the various towns and cities in this Commonwealth; but the relation of these to companies manufacturing gas is of such a character that it is thought proper and perhaps desirable to state some facts in regard to the extent of their business.

The use of electricity for illumination is of quite recent introduction in this State, where the first company was organized in 1880. Since that date the growth of the business has been rapid, and there are now forty companies in active operation, with an aggregate capital of about \$3,500,000, and a capacity of about 5,500 arc and 30,000 incandescent lights.

There is one company in each of the following places: Amesbury, Brookline, Beverly, Cambridge, East Boston, Fitchburg, Gloucester, Haverhill, Holyoke, Hudson, Lawrence, Lowell, Lynn, Marlborough, Milford, Natick, Newton, North Adams, Northampton, North Attleborough, Pittsfield, Salem, South Framingham, Springfield, Taunton, Turner's Falls, Westborough, Westfield and Worcester. There are two companies each in Brockton, Fall River and New Bedford, and in Boston there are five.

The companies furnishing and transmitting electricity for light are subject to the same provisions of law, as far as applicable, as the telegraph and telephone companies, and are entitled to a location for their wires in any town or city, which location the selectmen or board of aldermen must designate. (Chap. 221, Acts of 1883.)

The following gas companies were authorized by the Legislature of 1886 to furnish electric light: Marblehead Gas Light Co., Woburn Gas Light Co., Dedham and Hyde Park Gas Light Co., Charlestown Gas Co., and the Cottage City Gas Co. The Charlestown and Cottage City companies have completed their plants and are now furnishing the light.

All of the gas companies excepting the Cottage City are required, by the act authorizing them to furnish electricity for light, to first obtain the consent of the selectmen of the town or board of aldermen of the city in which they are located, — a restriction not imposed upon electric light companies.

The Waltham Gas Light Company has, by the unanimous consent of its stockholders, added to its business that of furnishing electric light, and has increased its capital stock \$10,000. The Spencer Gas Company, recently incorporated, has authority to furnish electricity for light; and the rights and privileges of both of these companies are the same as electric light companies organized under the general law.

CONCLUSION.

Reference has already been made to several matters upon which legislation may be thought desirable. No form for such legislation is suggested, but the Board will be ready to aid any committee of the Legislature with the facts in its possession. There are also other subjects affecting gas companies upon which legislation will be asked, but as the Board has not assumed to investigate the varying conditions governing them, no suggestions are made regarding the same.

STARKES WHITON,
EDWARD T. ROWELL,
FORREST E. BARKER,

Board of Gas Commissioners.

APPENDIX A.

[Chap. 346, Acts of 1886.]

AN ACT IN RELATION TO GAS COMPANIES.

Be it enacted, etc., as follows:—

SECTION 1. Every gas company shall have an office in the city or town in which its works are located, and shall keep in said office all the books and papers now required by law to be kept within the Commonwealth, and also such books as may be required to show its receipts and expenditures, and its indebtedness and financial condition; and shall at all times, upon application, submit its books to the inspection of the board of gas commissioners.

SECT. 2. Commencing on the first day of July, in the year eighteen hundred and eighty-six, every company engaged in the manufacture and sale of gas shall keep its books and accounts in a form to be prescribed by the board of gas commissioners, and the accounts shall be closed on the thirtieth day of June in each year, so that a balance sheet of that date can be taken therefrom and included in the return required by section seven of chapter three hundred and fourteen of the acts of the year eighteen hundred and eighty-five, which return shall be for the year ending the thirtieth day of June, and shall be made to the board of gas commissioners on or before the second Wednesday of September in each year: *provided*, that the return for the current year shall include the period from the first day of July, in the year eighteen hundred and eighty-five, to the thirtieth day of June, in the year eighteen hundred and eighty-six, inclusive; and *provided, also*, that manufacturing companies in which the manufacture of gas is a minor portion of their business shall only be required to keep accounts of the expenses and income of their gas business. The board of gas commissioners shall prepare such abstracts of the returns as it shall deem expedient, and shall transmit said abstracts, together with its annual report, to the secretary of the Commonwealth on or before the first Wednesday of January in each year, to be laid before the general court. Fifteen hundred copies of said document shall be printed for publication and distribution as one of the series of public documents.

SECT. 3. No gas company, unless specially authorized by the legislature, shall hereafter issue any bonds at less than the par value, nor for an amount exceeding its capital actually paid in and applied to the purpose of its incorporation. The proceeds of all bonds issued shall be applied to the payment of obligations in-

curred for the enlargement or extension of the works and the purchase of real estate for the use of the company, or for the payment of liabilities existing at the time of the passage of this act. A company may, upon vote of a majority in interest of its stockholders, at a meeting duly called for the purpose, issue bonds, in accordance with the provisions of this section, to bear interest at not exceeding six per cent. per annum, and may secure the payment of principal, and interest which shall accrue, by a mortgage of its franchise and other property.

SECT. 4. No gas company shall transfer its franchise, lease its works or contract with any person, association or corporation to carry on its works, without the authority of the legislature.

SECT. 5. Upon the petition in writing of any person who has a residence or place of business in a city or town where a company is engaged in the manufacture and sale of gas for lighting or for fuel, and who is aggrieved by the refusal or neglect of such company to supply him with gas, the board of gas commissioners shall have authority to issue an order directing and requiring such company to supply such person with gas for either of said purposes, upon such terms and conditions as are legal and reasonable. Said board shall not issue its order under this section except after a notice to such company, directing it to appear at a time and place therein named, to show cause, if any there be, why the prayer of such petition should not be granted.

SECT. 6. After the thirty-first day of December of the current year, all meters used for measuring gas supplied to consumers shall register the quantity of gas passing through them in cubic feet, so that the number of cubic feet of gas consumed can be easily ascertained by the consumer of such gas; and no meter shall be used that may confuse or deceive the customer as to the number of cubic feet of gas he has consumed, or as to the price he pays for the same per thousand cubic feet, and no rent shall be charged for use of meter when the consumer uses gas to the value of seven dollars in any one year.

SECT. 7. In the construction of this chapter, of chapter sixty-one of the Public Statutes, and of chapter three hundred and fourteen of the acts of the year eighteen hundred and eighty-five, the terms "gas company" and "corporation" shall include all persons owning or operating works for the manufacture and sale of gas for heating or illuminating purposes within the Commonwealth.

SECT. 8. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

SECT. 9. This act shall take effect upon its passage. [*Approved June 30, 1886.*]

APPENDIX B.

GENERAL INSTRUCTIONS

REGARDING THE

FORM FOR THE BOOKS AND ACCOUNTS TO BE KEPT
BY GAS COMPANIES.**Books.**

The general books of the Company shall consist of Cash Book, Journal and Ledger. Cash transactions may be carried through the Journal or posted directly from the Cash Book into the Ledger, at the option of the bookkeeper.

Such supplementary books may be kept as shall be needed to give the information required in the annual returns.

Accounts.

The Ledger Accounts shall show: —

- The Capital Stock.
- Bonds issued.
- Notes Payable.
- Notes Receivable.
- Cost of Works.
- Deposits.
- Dividends.
- Interest.
- Reserved Funds.
- Depreciation Fund.
- Investments.
- Materials.
- Cash.
- Shop (or Jobbing) Account.
- Stoves, Engines and Fixtures.
- Amounts due to and from the Company.
- Income from all sources.
- Expenses of every class.
- Manufacturing (or Gas) Account.
- Profit and Loss.

Cost of Works.

This account should show, either in detail or in one "Construction Account" (as may have been the custom of the Company), the cost of the Company's works, including street mains, meters and holders, as they stood on its books on the 30th day of June, 1886. Any company which has not heretofore kept such an account should open it now with the present estimated value (in detail, if pos-

sible) of its works. Important additions to works and extensions of mains should be charged to this account. Any contributions towards the cost of such extensions to be credited to this account.

Deposits.

This account should be credited with the amount of cash received from consumers and held as security for gas bills, and be debited with all amounts returned.

Dividends.

All dividends as declared should be credited to this account and be charged directly to Profit and Loss Account, and as paid be charged to Dividend Account.

Interest Account.

This account should show, in detail, all interest paid or received by the Company (except where interest on investments or reserved funds is credited directly to "Reserved Fund" Account as an increase thereof). The account should be closed at the end of the year by a transfer of *totals* to Profit and Loss Account.

Investments.

This account should show, in detail, all investments, including any real estate so held.

Materials.

All pipe, fittings and other supplies, except coals, enrichers and purifying materials, should, when purchased, be charged to this account (which may be subdivided into several accounts if the bookkeeper prefers). When any of the materials are *used*, the value thereof should be transferred to the debit of the particular account for which the same are used, and be credited to this account. When materials, either old or new, are *sold*, the proceeds should be credited to the account to which such materials stood charged when sold.

On June 30, an inventory should be taken of all materials on hand, and the amount thereof should agree with the balance of this account (or accounts, if more than one be kept), and appear as an asset of the company.

Smaller companies purchasing supplies only as wanted for immediate use, may, if preferred, charge the cost directly to the account for which used.

Shop (or Jobbing) Account.

Companies doing gas-fitting, or other work to be paid for by customers, should charge to this account the cost of all labor and materials used, and credit it with all sums received for such work; also, at the end of the year, with any sums due therefor, but unpaid: the balance of the account, showing the gain or loss on such business, should be transferred to Profit and Loss Account. No labor or material used in repairs of the company's property should be charged to this account.

Stoves, Engines and Fixtures.

Companies dealing in gas stoves, gas engines or gas fixtures, or keeping stoves or engines to rent or loan, should debit this account with the cost thereof, and credit it with the proceeds of all such articles sold. At the end of the year the account should be credited with the value of all stoves, engines and fixtures on hand (those kept to rent or loan to be estimated at their value for future use only), which value should be carried forward to a new account, and stand as an asset of the company.

The difference between the debit and credit amounts showing the gain or loss in the business must be transferred to Profit and Loss Account.

A separate account for each of the above may be kept if desired.

Manufacturing (or Gas) Account.

At the close of the year the various expense accounts should be closed by transfer to the debit of this account, which is to be credited with the several items of income arising from the manufacture and sale of gas, so that the balance shall agree with that in the statement of expenses and income called for in the Annual Return of the Commissioners, and such balance is to be transferred to Profit and Loss Account.

Profit and Loss.

This account should show : —

- Balance brought forward from previous year.
- Balance of Manufacturing Account.
- Interest paid.
- Interest received.
- Dividends declared.
- Other items credited and charged (in detail).
- Balance carried forward to next year.

Items of income, or expenses not belonging to the operations of the current year should be carried directly to Profit and Loss Account.

Balance Sheet.

The annual Balance Sheet required by the Commissioners must include in the item of "Unpaid Bills" *all* debts incurred remaining unpaid at the end of the year. Any coupons or interest due and not paid at the end of the year should also appear as a liability. The sheet must also include all income earned, but not collected, and all other sums due the Company at the end of the year.

Supplies, etc., on Hand.

Companies which have not heretofore kept an accurate account in their books, of Supplies, Coal, Coke, Tar, etc., on hand and amounts due to or from the Company at the end of each year, should on the 30th of June of the present year make such entries as will enable the bookkeeper to make a Balance Sheet on that date in accordance with the form required by the Commissioners, which sheet will be considered as a statement of the affairs of the Company, for comparison with future returns.

Income Accounts.

To enable Companies to readily and accurately answer the questions in the form adopted by the Commissioners for the Annual Returns, these accounts should be kept so as to show separately the amounts received from :

- Sales of Gas.
- Sales of Coke.
- Sales of Tar.
- Sales of Ammoniacal Liquor.
- Public Lamps (gas lamps only).
- Public Lamps (other than gas lamps).
- Rent of Meters.
- Rent of Gas Stoves and Engines.

Receipts for rents, wharfage, etc., should be credited to Profit and Loss Account, and not allowed to increase the receipts of the gas manufacturing department.

Dividends on investments and reserved funds should also go to the credit of Profit and Loss Account except when credited directly to Reserved Funds as an increase thereof.

Companies engaged in the business of steam heating, electric lighting, etc., should keep the receipts and expenses of such business separate and distinct from the gas business, and carry the gain or loss directly to Profit and Loss Account.

SALES OF GAS (OR GAS CONSUMERS') ACCOUNT :

Should be debited (and Manufacturing, or Gas, Account be credited) at the end of each month or quarter, according as bills are rendered, with the aggregate amount of bills for gas sold, and be credited from time to time with all sums received in settlement of such bills, so that the account shall always show the amount due the Company for gas sold. When companies make a discount for prompt payment, it will probably be found most convenient to carry into this account only the net rate, carrying to a special account, or directly to Manufacturing Account, any excess eventually collected. When a discount is made at the end of the year for large consumption, or a special allowance made for any cause, it should be debited to Manufacturing, and credited to this account.

SALES OF COKE :

This account should stand debited at the beginning of the year with the market value of coke on hand, and should be debited from time to time with all sums paid for preparing and delivering (not including any wages charged in item 5 of Expense Accounts), and be credited with all coke sold during the year, and also with the value of that on hand at the end of the year, the latter item to be carried forward to debit of a new account, and included in the assets of the Company. The difference between the debit and credit amounts should show the net value of the coke produced during the year and be transferred to the credit of Manufacturing Account. The cost of any coke bought for sale should be charged to this account.

SALES OF TAR:

This account should be debited at the beginning of the year with the value of tar on hand, and during the year with any expenses incurred in delivery or preparation for delivery (not including any wages charged in item 5 of Expense Accounts). The account should be credited with all tar sold, and at the end of the year with the market value of the tar on hand. The balance should indicate the net value of tar made during the year, and be transferred to the credit of Manufacturing Account. The value of the tar on hand must appear as an asset of the company, at the debit of a new account.

SALES OF AMMONIACAL LIQUOR:

So far as practicable, this account should be kept in the same manner as "Sales of Coke" and "Sales of Tar."

PUBLIC LAMPS:

The sum received for gas used in these may be credited to this account, or, if preferred, to "Sales of Gas" Account; in either case appearing eventually to the credit of Manufacturing Account.

Lamps (other than gas) should be credited with all sums received for the supply and maintenance thereof and be closed by transfer to Manufacturing Account.

RENT OF METERS:

This account should be credited with all sums charged to consumers as a special rent of meters, and be closed at the end of the year by transfer to the credit of Manufacturing Account.

RENT OF GAS STOVES AND ENGINES:

This account should show all sums charged for the use of stoves or engines belonging to the company and rented to consumers, but must not include any sums charged consumers for gas used in stoves and engines. This account will also be closed at the end of the year by transfer to Manufacturing Account.

Expense Accounts.

In order to correctly report the various items of expenses as called for in the Annual Return, they should be separated into the following accounts, viz. :—

1. Coals.
2. Enrichers.
3. Purifying Materials.
4. Water.
5. Wages at Works.
6. Repairs of Works.
7. Apparatus and Machinery.
8. Distribution Wages.
9. Repairs of Pipes.
10. Repairs of Meters.

11. Public Lamps (Gas Lamps only).
12. " " (other than Gas Lamps).
13. Directors' Allowances.
14. Salaries of Officers.
15. General Salaries.
16. Rent of Offices.
17. General Office Expenses.
18. Taxes.
19. Insurance.
20. Law Expenses.
21. Claims.
22. Bad Debts.
23. Incidental Expenses.

The several expense accounts must be closed at the end of the year by transfer to debit of Manufacturing Account.

Expense Accounts are to be kept as follows, viz. : —

1. COALS:

This account must be debited at the beginning of the year with value of caking coals on hand, and after that with the cost of all purchased, including freight, wharfage, demurrage, marine insurance, discharging and all other expenses incurred in landing the coal in the bins. At the close of the year the account must be credited with the value, in the bins, of the coal on hand, so that the balance will represent the actual cost of the coal carbonized.

2. ENRICHERS:

This account must be debited at the beginning of the year with the value of all enriching materials on hand, and after that with the cost (landed at the works) of all cannel coal, naphtha or other material used for enriching, and be credited at the end of the year with the value, at the works, of all such materials on hand, so that the balance will represent the actual cost of the materials *used* during the year.

3. PURIFYING MATERIALS:

This account must be opened and kept in the manner prescribed for "Coals" and "Enrichers." Companies using iron sponge, should estimate its value *for future use*, at the beginning and end of the year, so that the account shall show the value of all purifying materials chargeable to the expenses of the year.

4. WATER:

To show the cost of water used during the year.

5. WAGES AT WORKS:

This account should show the total wages paid for the manufacture, purification and storage of gas, including wages of engineers at works.

6. REPAIRS OF WORKS:

To include all expenditures for materials and labor in the general repairs and maintenance of the manufacturing plant, including renewal of retorts and repairs of holders.

7. APPARATUS AND MACHINERY:

To include cost of all apparatus and machinery purchased or built during the year, not included in repairs of works, nor charged to Construction Accounts.

8. DISTRIBUTION WAGES:

To include clerical labor in this department, wages of meter takers, and salary or commissions of collectors.

9. REPAIRS OF PIPES:

This account must be debited with the cost of all repairs, renewals and maintenance of mains and service pipes, including labor and materials, also cost of all new service pipes, except when laid in connection with extensions of mains. Any sums received as contributions towards the cost of such work must be credited to the account.

10. REPAIRS OF METERS:

To include the cost of all labor and materials used in the repairs of meters; also the cost of new meters required to replace any worn out or defective; also the expense of setting meters when no charge therefor is made to consumers.

11. PUBLIC LAMPS (GAS LAMPS ONLY):

To include any and all expenses incurred in the care of such lamps, including lighting.

12. PUBLIC LAMPS (OTHER THAN GAS):

To include cost of lighting, repairing and materials used for any public lamps supplied by the company (other than gas lamps).

13. DIRECTORS' ALLOWANCES:

To include any allowance for special services, or attending meetings, but not salaries.

14. SALARIES OF OFFICERS:

To include salaries of President, Treasurer, Clerk and any other officers of the Corporation.

15. GENERAL SALARIES:

To include salaries of General Superintendent, and of Clerks and Messengers not included in Accounts 5 and 8.

16. RENT OF OFFICES.

17. GENERAL OFFICE EXPENSES:

To include printing, postages, stationery and all other items of office expense not charged elsewhere.

18. TAXES:

To include all local and State taxes.

19. INSURANCE:

To include fire insurance on buildings, machinery, coal and other property, also boiler insurance.

20. LAW EXPENSES.

21. CLAIMS:

To include all sums paid in settlement of suits or claims against the company for injuries to persons or property.

22. BAD DEBTS:

To include only overdue bills not likely to be paid, but not to include any sum as an *estimate* of what may prove bad in the future.

23. INCIDENTAL EXPENSES:

To include only such items as cannot be readily apportioned to other accounts.

Companies making water gas or oil gas either exclusively or as an auxiliary to the manufacture of coal gas, should charge the cost of coal or other fuel used for generating steam or gas to "Coals" account, and the cost of naphtha or petroleum used to "Enrichers."

APPENDIX C.

COMMONWEALTH OF MASSACHUSETTS.

OFFICE OF THE BOARD OF GAS COMMISSIONERS,
No. 13 BEACON STREET,
BOSTON, July 12, 1886.

To the Presidents and Directors of the several Gas Companies in the Commonwealth.

Blanks for the annual returns to this Board as required by law are sent herewith.

The blanks are sent in duplicate, and the several companies are desired to keep an accurate copy of the return made, as it may be found convenient for reference in making future returns.

Please observe the various explanatory foot-notes.

When, from any cause, it is not practicable to answer any particular question, the person preparing the return will please fill the space designed for the answer with a dash (—) to indicate that the question has not been overlooked.

Manufacturing and other companies engaged in the manufacture of gas for sale, in connection with their other business, will please estimate the value of their gas plant (when not already separated on their books), and answer all other questions fully.

It is again urgently requested that the managers of all companies make special effort to have their returns *as accurate and complete as possible*.

It is expected that the Balance Sheet will be an exact transcript from the books of the company when closed at the end of business for the year ending June 30, and be prepared in accordance with the directions (under the headings of "Balance Sheet" and "Supplies, etc., on hand") on page 6 of the General Instructions recently issued by this Board.

Whenever in the returns the expressions “close of the year” or “during the year” are used, the year ending on the thirtieth day of June, 1886, is intended.

By a change in the statute, the returns are now required to be made to this Board on or before the SECOND WEDNESDAY OF SEPTEMBER in each year; the return for the current year will therefore be due on or before the eighth day of September next.

Although special questions (see pages 22 and 23) have been arranged for companies making oil or water gas, those companies are, nevertheless, expected to answer as many of the other questions as the nature of their business will admit.

Any inquiries, or other communications in relation to the returns, should be addressed to STARKES WHITON, Chairman of the Board, at this office.

By order of the Board of Gas Commissioners,

WALTER S. ALLEN, *Clerk.*

RETURN OF THE COMPANY TO THE BOARD OF GAS COMMISSIONERS OF MASSACHUSETTS.

FOR THE YEAR ENDING JUNE 30, 1886.

Please give full corporate title of company.

Location of principal business office.

Names of the cities or towns supplied with gas by the company, with number of consumers' meters in each place.

SCHEDULE A.

STATEMENT OF CAPITAL AT CLOSE OF BUSINESS, JUNE 30, 1886.

1. Capital authorized by charter, \$
2. Capital authorized by votes of company,
3. Capital paid in :
 shares, par value, \$,

Whole number of stockholders,

Males,

Females, . Amount of stock held by females, shares.

Trustees, . Amount of stock held by trustees, shares.

Executors or administrators, . Amount of stock held by
 same, shares.

Institutions or Corporations, . Amount of stock held by
 same, shares.

Number of stockholders resident in Massachusetts,

Amount of stock held in Massachusetts, shares.

BONDS, DEBT, AND COST OF PLANT.

4. Statement of bonds issued, viz. : —

Date.	Tenor.	How Secured.	Rate of Interest.	Amount.

5. Total amount of bonds issued, \$
6. Floating debt (not including amounts due, or notes given, for supplies, etc.),
7. Capital paid in (as per item 3),
8. Total liability for capital and loans, \$
9. Cost of real estate,* \$
10. Cost of machinery, apparatus, and other appliances used in the manufacture of gas,*
11. Cost of street mains,*
12. Cost of meters,*
13. Cost of other permanent works, not included in above (stating nature thereof),*
14. Total cost of plant as per books of the company June 30, 1886, \$
15. Amount (if any) charged to construction during the year, . \$

COMPARISON OF VALUES.

16. Value of real estate, as assessed in the city or town where located, \$
17. Value of machinery and apparatus, as assessed in the city or town where located,
18. Value of any other property, as assessed in the city or town where located,
19. Total value of plant, as assessed by local assessors, . . . \$
Total cost, as per item 14,
20. Excess of † value, over † value, \$
- Total cost of plant, as per item 14, \$
- Amount of capital and loans, as per item 8,
21. Cost of plant ‡ than capital and loans, . . . \$

* As the accounts stand on the books of the company at close of business June 30, 1886.

† This blank to be filled with the word "assessed" or "cost" as required.

‡ This blank to be filled with the word "more" or "less" as required.

SCHEDULE B.
STATEMENT OF INCOME AND EXPENSES FOR THE YEAR ENDING JUNE 30, 1886.

EXPENSES.				INCOME.	
FOR MANUFACTURE OF GAS:		FROM SALE OF GAS:			
1. Costs (other than those used for enriching) including all expenses of depositing at works,		1. feet @ \$. . . per M feet,			
2. Enrichers,		2. Public lamps (number . . .)			
3. Purifying materials,		Estimated consumption,	feet,		
4. Water,		3. Under contracts,	feet,		
5. Wages at works,		Estimated consumption,	feet,		
6. Repairs and maintenance of works (including renewal of retorts),		4. Total from sale of gas,			
7. Apparatus and machinery,		5. Coke,			
Less old material sold,		bushels,			
8. Wages of meter-takers, clerical labor in this department, and salary or commission of collectors,		6. Tar,			
9. Repairs, renewals and maintenance of mains and service pipes,		barrels,			
10. Repairs and renewals of meters,		7. Ammoniacal liquor,			
Less old material sold,					
11. Lighting and repairing (gas lamps only),		8. Total from sale of residuals,			
12. Lighting and repairing, and materials used for, other lamps,					
13. Directors' allowances,		FROM OTHER SOURCES, VIZ.:			
14. Salaries of officers,		9. Rent of meters,			
15. General salaries,		10. Rent of gas stoves and engines,			
16. Rent of offices,		11. Public lamps other than gas lamps,			
17. General office expenses,		12. †			
FOR MISCELLANEOUS EXPENSES:		13.			
18. Taxes.		14.			
Town or city,					
Corporation,					
State inspection,					
19. Fire Insurance,					
20. Law expenses,					
21. Claims,					
22. Bad debts,					
23. Incidental expenses,* viz.:					
a					
b					
c					
24. Total expenses,		15. Total receipts,			
25. Balance to profit and loss,					

* To include only such items of expenses attending the manufacture and sale of gas, as are not already given.

† Such items of income arising only from the manufacture and sale of gas as are not included above.

SCHEDULE C.
PROFIT AND LOSS ACCOUNT, JUNE 30, 1886.

Dr.	PROFIT AND LOSS ACCOUNT, JUNE 30, 1886.		Cr.
For balance from last account (if any),	\$		\$
Interest on bonds, loans and deposits,			
dividends declared on stock, viz.:			
per cent. due,			
per cent. due,			
other items (giving particulars), viz.:			
amount carried to reserved fund, .			
" " depreciation fund,			
total amount at debit,			
balance (if surplus),			
	\$		\$
By balance from last account (if any),			
balance of income as per item 25, Schedule B,			
Interest received on loans and deposits,			
rents,			
other items, viz.:			
Total amount at credit,			
By balance (if deficit),			
			\$

SCHEDULE D.
RESERVED FUND ACCOUNT.

[illegible]

SCHEDULE E.
DEPRECIATION FUND ACCOUNT.

[illegible]

* Any sums charged to this account during the six months ending June 30, 1886, stating the purpose for which the same were used.

SCHEDULE F.

BALANCE SHEET, JUNE 30, 1886.

ASSETS.		LIABILITIES.	
Real estate,	Capital stock,		
Machinery and manufacturing appliances,	Bonds issued,		
Street mains,	Notes payable,†		
Meters,	Unpaid bills,		
Cash on hand,	Deposits,		
Due for gas,	Unpaid dividends,		
Other accounts due the company,	Interest due but not paid,		
Coal on hand,	Reserved fund,		
Coke on hand,	Depreciation fund,		
Tar on hand,	Amounts due from the company, not included above,		
Enrichers on hand,			
Purifying materials on hand,			
Other materials on hand,			
Stoves on hand,			
Fixtures on hand,			
Horses, wagons, etc.,			
Office furniture,			
Notes receivable,			
Investments * (giving particulars thereof),			
Total assets as per books of the company,	Total liabilities as per books of the company,		
Profit and Loss balance (if deficit),	Profit and Loss balance (if surplus),		

* Including any real estate so held.

† Please say whether secured by mortgage or not.

SCHEDULE G.

LIST OF SALARIED OFFICERS.

NAME.	Official Position.	Annual Salary.

GENERAL INFORMATION.

Location of works,

Area of land occupied by the company,

Number of retorts viz. : —

benches of 1 each.

benches of 2 each.

benches of 3 each.

benches of 4 each.

benches of 5 each.

benches of 6 each.

benches of 7 each.

benches of 8 each.

Number of benches rebuilt during the last six months,

How long were such benches in actual use?

Average total production of gas per retort in such benches,

Average number of retorts employed from October to March, inclusive,

Average number of retorts employed the remainder of the year,

Materials used in purifiers,

Total amount of lime used during the year, bushels.

Cost of same per bushel, cents.

Quantity of gas purified per bushel of lime,

Cost of iron sponge per bushel, cents.

Estimated quantity of gas purified per bushel of iron sponge.

Sizes of street mains and lengths of each size, viz. : —

Sizes — Diameters.	Total Length, Dec. 31, 1885. Feet.	Laid Since. Feet.	Total Length, June 30, 1886. Feet.
1 inch, . . .			
1½ " . . .			
1½ " . . .			
2 " . . .			
3 " . . .			
4 " . . .			
6 " . . .			
8 " . . .			
10 " . . .			
12 " . . .			
14 " . . .			
16 " . . .			
18 " . . .			
20 " . . .			
24 " . . .			
30 " . . .			
Totals, . . .			

Usual day pressure on street mains as indicated at works,

Usual night pressure on street mains as indicated at works,

Estimated capacity of works per diem,

Number of feet of gas made during the year,

“ “ “ sold by meter during the year,

“ “ “ supplied to public lamps during the year,

“ “ “ used at works and offices during the year,

“ “ “ used in the mills of the company * during the year,

“ “ “ unaccounted for during the year,

Number of meters in use by consumers at the close of the year,

Capacity of meters and number of each size in use, viz. : —

Size. No. of Lights.	Number in use Dec. 31, 1885.	Added Since.	Number in use June 30, 1886.
1, . . .			
2, . . .			
3, . . .			
5, . . .			
10, . . .			
20, . . .			
30, . . .			
35, . . .			
40, . . .			
45, . . .			
50, . . .			
60, . . .			
80, . . .			
100, . . .			
125, . . .			
150, . . .			
180, . . .			
200, . . .			
250, . . .			
300, . . .			
400, . . .			
500, . . .			
Totals, .			

Is any meter rent charged, and what is the rule governing such charge?

Number of gas stoves used by consumers during the year,

Number of gas engines used by consumers during the year,

Average candle power of the gas burning at the rate of five feet per hour,

Kind of burner used in making the test,

Price per 1,000 feet at the close of the year, \$

Are any discounts allowed, and upon what rule are such discounts made?

When was such price established?

Price previous to that date, \$

Price for public lamps, \$

Estimated hourly consumption of each lamp, cubic feet.

Estimated number of hours during the year that lamps are lighted,

Kind of burner principally used on public lamps,

Pounds of coal carbonized (not including any used as an enricher),

Kinds of coal so used,

Proportions of each if used together,

Average cost of same per ton of 2,240 lbs., delivered at works, \$

* This question will only require an answer from companies engaged in other manufactures.

Statement of coals for year ending June 30, 1886 : —

On hand June 30, 1885.	Received during the Year.	Used during the Year.	On hand June 30, 1886.
Tons.	Tons.	Tons.	Tons.

What materials were used for enriching the gas?

Amount of each per ton of coal carbonized,

Average cost of same delivered at the works, viz : —

Cannel coal, \$	per ton ;	amount used,	tons.
Naphtha, \$	per gallon ;	amount used,	galls.
\$	per	; amount used,	

Statement of residual products for year ending June 30, 1886.

	On hand June 30, 1885, Estimated.	Made during the year, Estimated.	Used during the year, Estimated.	Sold During the year.	On hand June 30, 1886, Estimated.
Coke, bushels.					
Tar, gallons.					
Ammoniacal liquor, gallons.					

Prices now obtained for residuals : —

Tar per bbl., \$

Coke per bush., \$

Ammoniacal liquor per , \$

Average number of men employed, viz : —

	Foremen.	Stokers.	Other men.
April to September, inclusive, .			
October to March, inclusive, .			

Average wages of men employed, viz : —

Foremen, per month, \$

Stokers, " \$

Other men, " \$

What additions, alterations or improvements not already stated have been made to or in the property of the Company since the last return?

Has the company, since its last return, made any experiments or changes in methods of manufacture, or manner of dealing with consumers, which it desires to report herein?

ONLY THOSE COMPANIES MAKING "WATER GAS" ARE TO ANSWER THE
QUESTIONS ON THIS PAGE.

What patent process, if any, is used in the manufacture of gas?
 How long has such process been employed?
 Is said process used alone or as an auxiliary to the making of coal gas?
 If used as an auxiliary, how often is it so used, and how long each time?
 At what point in the works is the gas so made mixed with the coal gas?
 What kind of fuel is used for *generating the gas*?
 Amount so used, .
 Cost of same per ton of 2,240 lbs., delivered at works, \$
 What kind of fuel is used for *generating the steam*?
 Amount so used,
 Cost of same per ton of 2,240 lbs., delivered at works, \$
 Number of gallons of naphtha used,
 Cost per gallon, cents.
 Gas produced per gallon, cubic feet.
 Number of gallons of petroleum used,
 Cost per gallon, cents.
 Gas produced per gallon, cubic feet.
 Dimensions of generator,
 " superheater,
 " condenser or washer,
 Usual length of runs,
 Capacity of works per hour as observed in actual use,

ONLY THOSE COMPANIES MAKING "OIL GAS" ARE TO ANSWER THE
QUESTIONS ON THIS PAGE.

What patent process, if any, is used in the manufacture of gas?
 How long has such process been employed?
 Number of gallons of naphtha used,
 Average price per gallon, cents.
 Number of gallons of petroleum used,
 Average price per gallon, cents.
 Number of gallons of other oils used,
 Average price per gallon, cents.
 Gas produced per gallon of naphtha, cubic feet.
 " " petroleum, "
 " " other oils, "
 What amount of coal or other fuel was used?
 Kind of coal or other fuel so used,
 Cost of same per ton of 2,240 lbs., delivered at works, \$
 What percentage of the gas in the holder is atmospheric air?
 At what point in the works is the air mixed with the gas?

NAME AND RESIDENCE OF OFFICERS.

President,
Vice President,
Manager,
Superintendent,
Treasurer,
Clerk of the Corporation,

NAME AND RESIDENCE OF DIRECTORS.

President.

Treasurer.

Directors.

COMMONWEALTH OF MASSACHUSETTS.

SS.

1886.

Then personally appeared

and severally made oath to the truth of the foregoing statement by them subscribed, according to their best knowledge and belief.

Justice of the Peace.

THIRD ANNUAL REPORT

OF

THE BOARD

OF

GAS COMMISSIONERS

OF THE

Commonwealth of Massachusetts.

JANUARY, 1888.

BOSTON:

WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.

1888.

CR

Commonwealth of Massachusetts.

The Board of Gas Commissioners respectfully submits its Third Annual Report.

A change occurred in the Board in May last, the chairman, Hon. Starkes Whiton, having resigned for the purpose of accepting an appointment as a Commissioner of Savings Banks.

GAS COMPANIES.

In the year past there were 64 gas companies actively engaged in business in the Commonwealth. The Bay State Gas Company of Boston is not included in this number. The company reports that its works were started the 17th of December for the purpose of testing them, that a small quantity of gas has been made and sold to the Roxbury Gas Light Company, but that it is not making gas at the present time. The Clinton Gas Light Company, by special act of the last Legislature, was authorized to furnish gas in the town of Lancaster. So far as this Board is informed, the Dorchester Gas Light Company has taken no action under Chapter 372 of the Acts of last year allowing the sale or lease of its property. The owner of the gas works in Middleborough having died, the same have been purchased by W. B. Hammond.

On the petition of George W. Chipman, the Selectmen of Melrose, Nov. 1, 1887, gave to him and his associates permission to lay gas pipes in the streets and ways of that town, which is now supplied with gas by the Malden and Melrose Gas

Light Company. Under Sect. 16, Chap. 314, Acts of 1885, this company has taken an appeal to this Board from the action of the Melrose Selectmen, which appeal is still pending.

The Amesbury and Salisbury Gas Light Company has, during the year, erected water-gas works and begun the manufacture of gas.

The following list shows the Gas Companies incorporated under the general law during the year, with the date of incorporation and the amount of the capital stock.

Equitable Gas Company of Springfield,	May 27,	\$250,000
Winthrop Gas Company,	Aug. 23,	50,000
Union Gas Light Company (Rockland),	Aug. 25,	15,000
The Gardner Gas Light Company,	Dec. 14,	30,000

Of these companies, only one, so far as the Board is informed, has commenced operations, the Gardner company having begun to supply gas about the end of the year. The Equitable Gas Company of Springfield applied to the Board of Aldermen for authority to open the streets, but permission was refused.

The following table shows the corporate name, the localities supplied, the capital and the par value of the shares of the companies in active operation on the 30th day of June last: —

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Adams Gas Light Co.,	Adams,	\$17,300	\$25
Amesbury & Salisbury Gas Light Co.,	Amesbury,	1,250	50*
Amherst Gas Co.,	Amherst,	10,000	100
Arlington Gas Light Co.,	Arlington,	70,000	100
	Belmont,	—	—
	Winchester,	—	—
Attleborough Gas Light Co.,	Attleborough	23,200	100
Beverly Gas Light Co.,	Beverly,	40,000	100
Boston Gas Light Co.,	Boston (city proper)	2,500,000	500
Brockton Gas Light Co.,	Brockton,	64,000	100
Brookline Gas Light Co.,	Brookline,	350,000	100
	Boston (Brighton District),	—	—
Cambridge Gas Light Co.,	Cambridge,	700,000	100
	Somerville (in part),	—	—
Charlestown Gas Co.,	Charlestown,	500,000	50
	Somerville (in part),	—	—
	Medford (in part),	—	—

* 25 per cent. paid in.

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Chelsea Gas Light Co.,	Chelsea,	\$300,000	\$100
Chicopee Gas Works,	Chicopee Centre, . .	30,000	—
Citizens' Steam & Gas Light Co. of Lynn, *	Lynn,	125,000	100
Citizens' Gas Light Co. of Quincy,	Quincy,	33,000	100
Citizens' Gas Light Co. of South Reading,	Wakefield,	95,300	100
	Reading,	—	—
	Stoneham,	—	—
Clinton Gas Light Co.,	Clinton,	35,000	500
Cottage City Gas Co.,	Cottage City,	60,000	100
Danvers Gas Light Co.,	Danvers,	20,000	100
Dedham & Hyde Park Gas & Elec- tric Light Co.,	Dedham,	100,000	50
	Hyde Park,	—	—
Dorchester Gas Light Co.,	Boston (Dorchester District),	400,000	100
	Milton,	—	—
East Boston Gas Co.,	Boston (E. Boston),	220,000	25
Easthampton Gas Co.,	Easthampton,	30,000	100
Fall River Gas Works Co.,	Fall River (in part),	288,000	100
Fitchburg Gas Co.,	Fitchburg,	60,000	50
Gloucester Gas Light Co.,	Gloucester,	62,300	50
Great Barrington Gas Light Co., .	Great Barrington, . .	5,000	100
Greenfield Gas Light Co.,	Greenfield,	50,000	50
Haverhill Gas Light Co.,	Haverhill,	75,000	50
	Bradford,	—	—
Ipswich Gas Light Co.,	Ipswich,	16,000	100
Jamaica Plain Gas Light Co., . .	Boston (Ward 23),	200,000	100
Lawrence Gas Co.,	Lawrence,	400,000	100
	Methuen,	—	—
Leominster Gas Light Co.,	Leominster,	50,000	100
Lexington Gas Light Co.,	Lexington,	20,000	100
Lowell Gas Light Co.,	Lowell,	500,000	100
	Dracut,	—	—
	Tewksbury,	—	—
Lynn Gas Light Co.,	Lynn,	300,000	100
	Swampscott,	—	—
Malden & Melrose Gas Light Co.,	Malden,	170,000	100
	Melrose,	—	—
	Medford (in part),	—	—
	Everett,	—	—
Manufacturers' Gas Light Co., . .	Fall River (in part),	50,000	100
Marblehead Gas & Electric Light Co.,	Marblehead,	40,000	100
Marlborough Gas Light Co., . . .	Marlborough,	50,000	100
Milford Gas Light Co.,	Milford,	72,300	100
	Hopedale,	—	—
Miller's River Gas Light Co., . .	Athol,	40,000	100
Mutual Gas Light Co. of South- bridge,	Southbridge,	15,000	50
Nantucket Gas Light Co.,	Nantucket,	36,000	100
Natick Gas Light Co.,	Natick,	20,000	100
New Bedford Gas Light Co., . . .	New Bedford,	225,000	100
Newburyport Gas Co.,	Newburyport,	80,000	100
Newton & Watertown Gas Light Co.,	Newton,	200,000	100
	Watertown,	—	—
	Wellesley,	—	—
	Weston,	—	—

* This company manufactures fuel water gas.

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
North Adams Gas Light Co., .	North Adams, .	\$50,000	\$100
Northampton Gas Light Co., .	Northampton, .	50,000	25
North Attleborough Gas Light Co.,	No. Attleborough, .	68,100	100
	Attleborough Falls,	—	—
	Wrentham, . .	—	—
Norwood Gas Light Co., . .	Norwood, . .	12,000	100
Pittsfield Coal Gas Co., . .	Pittsfield, . .	62,500	100
Plymouth Gas Light Co., . .	Plymouth, . .	40,000	100
Roxbury Gas Light Co., . .	Boston (Roxbury District), . .	600,000	100
Salem Gas Light Co., . . .	Salem, . . .	300,000	100
	Peabody, . . .	—	—
South Boston Gas Light Co., .	Boston (South Boston), . . .	440,000	100
Spencer Gas Co.,	Spencer,	75,000	100
Springfield Gas Light Co., .	Springfield, . .	500,000	100
Taunton Gas Light Co., . .	Taunton, . . .	80,000	50
Waltham Gas Light Co., . .	Waltham, . . .	140,000	100
Westfield Gas Light Co., . .	Westfield, . . .	54,000	100
Woburn Gas Light Co., . . .	Woburn, . . .	45,100	100
Worcester Gas Light Co., . .	Worcester, . . .	500,000	100

The company at Fitchburg furnishes water, that at Gloucester maintains a wharf and supplies water, and that at Springfield furnishes steam for heating. In addition to these, the companies in Charlestown, Cottage City, Spencer and Waltham, furnished electric light. In all these cases, the capital employed in such operations is not separated from that invested in the gas business, and the capital as given is the total capital of the companies.

The following table shows the names of the owners of gas works not owned by gas companies, the localities supplied and the estimated value of the plant:—

Chicopee Manufacturing Co., . .	Chicopee Falls, . .	\$15,000 00
Holyoke Water Power Co., . .	Holyoke, . . .	100,000 00
A. H. Wray,	Lee,	10,000 00
W. B. Hammond,	Middleborough, . .	22,000 00
Otis Co.,	Ware,	10,000 00
Stevens Linen Works,	Webster, . . .	18,000 00
	Dudley.	

The following companies have bonds and notes outstanding : —

Amherst,	\$1,500 00
Attleborough,	4,000 00
Beverly (special stock),	11,800 00
Brockton,	35,000 00
Brookline,	55,000 00
Citizens' (Lynn),	150,000 00
Citizens' (Quincy),	13,000 00
Cottage City,	21,240 00
Danvers,	2,000 00
Dedham,	11,000 00
Ipswich,	7,000 00
Jamaica Plain,	40,000 00
Lexington,	3,272 00
Malden,	50,000 00
Marblehead,	1,500 00
Miller's River (Athol),	20,000 00
Natick,	10,000 00
New Bedford,	51,000 00
North Adams,	4,000 00
North Attleborough (dividend scrip),	68,100 00
South Boston,	20,000 00
Spencer,	75,000 00
Waltham,	30,000 00

The following table shows the whole number of stockholders, the number resident in Massachusetts and the value of the stock held within the Commonwealth : —

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at par of Stock held in Massachusetts.
Adams,	8	8	\$17,300
Amesbury,	9	5	*1,050
Amherst,	21	21	10,000
Arlington,	59	41	46,400
Attleborough,	29	26	22,000
Bay State,	15	8	4,400
Beverly,	44	36	32,100
Boston,	690	621	2,320,500
Brockton,	52	51	63,900
Brookline,	120	109	316,900
Cambridge,	387	345	623,100
Charlestown,	244	227	468,450

* Amount paid in.

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at par of Stock held in Massachusetts.
Chelsea,	124	117	\$293,500
Chicopee,	2	2	30,000
Citizens', Lynn,	12	2	200
Citizens', Quincy,	53	51	32,500
Citizens', Wakefield,	61	56	91,700
Clinton,	17	17	35,000
Cottage City,	22	19	40,200
Danvers,	39	39	20,000
Dedham,	40	36	97,500
Dorchester,	195	183	364,900
East Boston,	124	103	195,600
Easthampton,	35	30	26,800
Fall River,	10	7	13,200
Fitchburg,	31	29	54,150
Gloucester,	63	60	61,350
Great Barrington,	10	10	5,000
Greenfield,	38	27	43,750
Haverhill,	56	49	64,000
Ipswich,	28	28	16,000
Jamaica Plain,	136	127	190,600
Lawrence,	176	162	356,800
Leominster,	60	57	49,200
Lexington,	26	25	19,900
Lowell,	262	229	447,200
Lynn,	163	154	290,200
Malden,	143	123	139,100
Manufacturers', Fall River,	7	7	50,000
Marblehead,	30	23	32,000
Marlborough,	12	12	50,000
Milford,	48	47	72,100
Miller's River (Athol),	9	9	40,000
Mutual (Southbridge),	29	27	13,300
Nantucket,	57	53	34,700
Natick,	38	38	20,000
New Bedford,	168	141	203,200
Newburyport,	65	51	68,100
Newton,	178	167	186,700
North Adams,	44	35	46,800
Northampton,	40	29	30,025
North Attleborough,	37	34	67,400
Norwood,	10	9	10,100
Pittsfield,	51	43	58,500
Plymouth,	30	24	30,700
Roxbury,	250	243	593,800
Salem,	253	237	283,500
South Boston,	27	23	39,400
Spencer,	17	17	75,000
Springfield,	93	82	456,500
Taunton,	99	95	76,100
Waltham,	116	111	132,000
Westfield,	23	20	47,700
Woburn,	49	48	43,900
Worcester,	184	172	460,800

BOOKS, ACCOUNTS AND RETURNS.

The returns required by law for the year ending June 30, 1887, have been received from every company under the supervision of the Board, and with greater promptness than hitherto. Although it has not been found necessary to secure the intervention of the Attorney-General's Department in any instance, some of the companies are still too tardy in making their returns, causing thereby much extra labor and delay on account of the correspondence necessary in the correction and tabulation of the numerous statistics they contain.

From a careful study of these returns it is clear that substantial progress has been made towards uniformity of accounts, and that many of the extreme inaccuracies of former returns have been avoided. The principal difficulties have arisen in dealing with the various items of income and expense and the accounts of profit and loss; but there is reason to believe that in the returns for the current year much of this diversity will be eliminated. There is no part of the return in which strict uniformity of method and accuracy of detail is more imperatively demanded.

A very few returns give evidence of serious indifference to the requirements of law and the requests of the Board, but there is still need of great improvement in the case of a much larger number. To secure this the Board has devoted such time and attention as their other duties permitted, and now believes that all the companies may be credited with a sincere effort to make their accounts conform, in all respects, to the forms prescribed.

The failure of the companies to do this earlier must be regarded, upon a strict construction of the statute, as a violation of law; but the Board has not yet deemed it necessary in any case to resort to the extreme measures which the law provides. The instructions concerning the form of accounts have now, however, been so long in the possession of those who are to use them that there would seem to be no further valid excuse for any failure to understand and apply them.

The following statistics exhibit the aggregate receipts and ex-

penses of all the companies in the State, compiled from the items relating to the manufacture and sale of gas in the last two returns made to the Board : —

	FOR YEAR ENDING JUNE 30.	
	1886.	1887.
RECEIPTS : —		
For gas sold by meter,	\$3,678,206 06	\$3,789,643 30
For gas supplied to public lamps,	433,063 62	421,430 65
From sales of coke,	—	290,692 31
“ “ tar,	—	66,880 66
“ “ ammoniacal liquor,	—	23,370 82
“ “ residuals products,	347,985 34	—
“ rent of meter,	1,444 46	1,210 36
“ “ gas stoves and engines,	1,750 20	1,602 95
“ “ gas lamps,	—	470 57
From public lamps other than gas lamps,	8,806 01	8,945 05
From other sources,	1,078 24	592 41
Total,	\$4,472,333 93	\$4,604,838 08
EXPENSES : —		
1. Coals,	\$1,091,881 09	\$1,148,718 10
2. Enrichers,	96,796 08	128,323 35
3. Purifying materials,	37,286 59	38,195 89
4. Water,	18,497 18	21,865 77
5. Wages at works,	563,940 68	593,100 55
6. Repairs and maintenance of works (including renewal of retorts),	186,418 02	222,759 07
7. Apparatus and machinery,	78,095 20	4,821 84
8. Wages of meter takers, clerical labor in distribution, and salary or commission of collectors,	84,257 15	95,943 92
9. Repairs, renewals and mainten- ance of mains and service pipes,	130,537 98	104,279 74
10. Repairs and renewals of meters,	42,241 42	47,877 56
11. Lighting and repairing (gas lamps only),	17,605 32	18,079 71
12. Lighting and repairing and mate- rials used for other lamps,	6,714 52	7,117 61
13. Directors' allowances,	1,545 15	2,377 35
14. Salaries of officers,	83,379 38	94,497 43
15. General salaries,	115,619 09	111,101 36
16. Rent of offices,	7,850 01	9,656 93
17. General office expenses,	36,984 43	30,956 99
18. Taxes,	220,596 06	230,580 13
19. Fire insurance,	31,626 57	3,881 29
20. Law expenses,	7,375 23	21,469 52
21. Claims,	10,947 11	9,843 52
22. Bad debts,	8,223 00	21,921 14
23. Incidental expenses,	53,100 44	63,855 39
Total,	\$2,931,517 70	\$3,031,224 16

FOR YEAR ENDING JUNE 30.		
	1886.	1887.
Leaving an apparent net profit on their gas business of,	\$1,540,816 23	\$1,573,613 92
They have also received for interest,	30,433 14	31,809 72
.. .. . rents, etc.,	22,945 87	41,126 66
Making a total,	\$1,594,195 24	\$1,646,550 30
From these receipts were paid interest on bonds and loans,	\$26,696 46	\$25,959 23
Dividends,	993,573 00	996,577 00
Other items,	4,499 35	13,025 82
Leaving a surplus for the year of,	\$1,024,768 81	\$1,035,562 05
	\$569,426 43	\$610 998 25

Four of the companies appear not to have earned expenses, three others have not earned sufficient to warrant the declaring of any dividend upon their capital, and eight others have paid a part of their dividends out of a surplus earned in former years. The Marlborough Company has declared a dividend which it seems neither to have earned nor been able to pay.

In view of the large and rapid development of electric lighting throughout the State and of a considerable reduction in the average price, it is worthy of note that the receipts from sales by meter show a gain of more than \$111,000, and that the receipts from street lighting have fallen off less than \$12,000, or but a trifle more than $2\frac{1}{2}$ per cent. The considerable change in the expense items numbered 7, 14, 15 and 17, is due principally to an apportionment of these expenses in the returns of 1887 more nearly according to the prescribed form of accounts.

In the Appendix will be found under date of June 30, 1887, the separate balance sheet of the companies, as taken from the annual returns, with corrections made by the Board after examination and correspondence with the officers of the several companies.

Aggregates from these balance sheets and those in the returns of 1886 show the following facts :—

	YEAR ENDING JUNE 30.	
	1886.	1887.
ASSETS : —		
Real estate, machinery, street mains and meters,	\$12,389,932 24	\$12,497,087 93
Cash on hand,	676,568 33	604,845 51
Due for gas,	408,900 04	413,317 21
Other accounts due,	92,561 88	59,877 21
Materials, etc.,	379,117 40	590,571 12
Notes receivable,	381,840 56	371,607 71
Investments,	332,038 45	366,217 37
	\$14,660,958 90	*\$14,903,524 06
LIABILITIES : —		
Capital stock,	\$11,507,150 00	\$11,635,350 00
Bonds,	224,700 00	288,662 00
Notes payable,	223,110 00	294,133 18
Unpaid bills,	74,156 16	95,413 76
Unpaid dividends,	62,307 50	59,253 50
Deposits,	7,220 10	23,483 32
Interest due and unpaid,	1,534 52	1,521 83
Other items,	14,928 79	41,852 07
	\$12,115,107 07	\$12,439,669 66
Reserved and depreciation funds,	743,884 74	691,446 36
	\$12,858,991 81	\$13,131,116 02
Surplus,	1,801,967 09	1,772,408 04
	\$14,660,958 90	*\$14,903,524 06

Of these companies —

53 show an aggregate surplus of	\$1,902,217 69	\$1,868,334 78
8 show an aggregate deficit of	100,250 60	95,926 74
Leaving total net surplus as shown above,	\$1,801,967 09	\$1,772,408 04
Which added to reserves carried as liabilities,	743,884 74	691,446 36
Would show an actual surplus of	\$2,545,851 83	\$2,474,954 40
Equivalent to per cent. on capital of about	22	21

* Not including the Bay State Company of Boston, which was not in operation on June 30, 1887.

This is a decrease for the year of \$70,896.43, or less than 1 per cent. on the capital stock.

The following table shows the valuation of the property of each company as assessed by the local assessors:—

Name of Company.	Assessed Value.	Name of Company.	Assessed Value.
Adams.	\$12,900	Lynn.	\$107,050
Amesbury.	1,000	Malden.	120,500
Amherst.	10,000	Manufacturers' (Fall	
Arlington.	35,150	River).	45,300
Attleborough.	11,500	Marblehead.	13,400
Bay State.	202,000	Marlborough.	10,700
Beverly.	15,750	Milford.	76,638
Boston.	4,269,100	Miller's River (Athol).	10,000
Brockton.	68,300	Mutual (Southbridge).	7,700
Brookline.	337,700	Nantucket.	6,000
Cambridge.	662,000	Natick.	12,200
Charlestown.	536,300	New Bedford.	260,000
Chelsea.	271,400	Newburyport.	40,200
Chicopee.	28,000	Newton.	270,280
Citizens' (Lynn).	20,000	North Adams.	12,500
Citizens' (Quincy).	13,350	Northampton.	51,000
Citizens' (Wakefield).	22,000	North Attleborough.	53,300
Clinton.	25,000	Norwood.	*
Cottage City.	*	Pittsfield.	64,500
Danvers.	3,950	Plymouth.	14,250
Dedham.	35,000	Roxbury.	602,900
Dorchester.	298,200	Salem.	284,600
East Boston.	81,400	South Boston.	390,500
Easthampton.	29,500	Spencer.	24,000
Fall River.	178,900	Springfield.	434,770
Fitchburg.	61,450	Taunton.	64,400
Gloucester.	58,500	Waltham.	141,500
Great Barrington.	1,200	Westfield.	44,400
Greenfield.	19,500	Woburn.	45,100
Haverhill.	122,500	Worcester.	527,000
Ipswich.	5,400	Chicopee Falls.	10,000
Jamaica Plain.	175,700	Holyoke.	100,000
Lawrence.	376,000	Ware.	14,550
Leominster.	23,000	Webster.	7,500
Lexington.	1,500	Lee.	3,100
Lowell.	1,110,570	Middleborough.	*
			\$12,993,458

* Not returned.

If the three companies which do not return their taxable value be included in the total at their value of last year, \$18,800, the total valuation would be \$13,012,358; or omitting Spencer, as not in last year's list, an increase of \$798,590 over last year's valuation.

The following table shows the amount paid by each company for taxes and the amount for each thousand feet of gas sold:—

NAME OF COMPANY.	Amount of Taxes paid.	Amount per Thousand sold.
Adams,	\$354 38	\$0.0593
Amesbury,	26 48	.0374
Amherst,	154 39	.1990
Arlington,	672 50	.1239
Attleborough,	396 31	.0733
Beverly,	224 54	.0499
Boston,	60,531 32	.0567
Brockton,	1,167 91	.0928
Brookline,	5,039 32	.1207
Cambridge,	16,183 49	.1603
Charlestown,	8,402 08	.1230
Chelsea,	5,529 33	.2072
Chicopee,	477 55	.0714
Citizens' (Lynn),	197 32	<i>a</i>
Citizens' (Quincy),	277 95	.0583
Citizens' (Wakefield),	519 50	.1300
Clinton,	620 54	.0911
Cottage City,	113 56	<i>a</i>
Danvers,	44 71	.0459
Dedham,	702 08	.1104
Dorchester,	5,885 91	.1362
East Boston,	4,666 96	.1490
Easthampton,	452 45	.1483
Fall River,	5,831 79	.1443
Fitchburg,	1,294 40	.1109
Gloucester,	1,389 13	.1479
Great Barrington,	22 49	.0532
Greenfield,	747 53	.1753
Haverhill,	1,907 46	.0529
Ipswich,	93 11	.0801
Jamaica Plain,	3,662 11	.1523
Lawrence,	8,742 89	.1325
Leominster,	499 52	.3229
Lexington,	71 05	.0953
Lowell,	14,631 75	.0855
Lynn,	5,092 99	.1199
Malden,	2,652 83	.1144
Manufacturers' (Fall River),	912 44	.0779
Marblehead,	371 09	.1223
Marlborough,	303 12	.0911
Milford,	1,230 36	.1826
Miller's River (Athol),	160 54	.0748
Mutual (Southbridge),	249 10	.1760
Nantucket,	122 28	.0577
Natick,	317 18	.1185
New Bedford,	5,004 71	.1240

a Gas sold not given.

NAME OF COMPANY.	Amount of Taxes paid.	Amount per Thousand sold.
Newburyport,	\$1,154 81	\$0.1412
Newton,	4,121 51	.1086
North Adams,	574 09	.0435
Northampton,	830 24	.0953
North Attleborough,	1,253 37	.1211
Norwood,	167 91	<i>a</i>
Pittsfield,	1,728 69	.1362
Plymouth,	292 72	.0805
Roxbury,	13,272 91	.0976
Salem,	5,148 69	.1426
South Boston,	6,487 57	.1181
Spencer,	763 56	<i>b</i>
Springfield,	8,136 76	.1363
Taunton,	1,638 95	.0575
Waltham,	2,034 17	.0826
Westfield,	819 96	.1697
Woburn,	894 28	.1329
Worcester,	13,805 99	.1716
Chicopee Falls,	*	
Holyoke,	239 59 ^c	.0061
Ware,	241 00	.0614
Webster,	101 07	.0755
Lee,	50 63	.2486
Middleborough,	*	
Total,	\$231,708 92	

* No tax returned.

b Works in operation only three months.*a* Gas sold not given.*c* Gas Commission and Inspector only.

The total sum paid by the companies for taxes, including State inspection, was \$231,708.92, an average of $10\frac{16}{100}$ cents per thousand feet sold, being an increase over the previous year, in the total amount, of \$10,760.69, and of $7\frac{6}{100}$ of a cent per thousand feet of gas sold.

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table:—

NAME OF COMPANY.	Rate per cent.	Amount of Dividends.	Amount per Thousand sold.
Adams,	20	¹ \$3,385	\$0.5668
Amesbury,	—	² —	—
Amherst,	8	800	1.0339
Arlington,	6	4,200	.7739
Attleborough,	8	1,856	.3434
Beverly { ordinary stock,	—	² —	—
{ special stock,	6	708	.1574
Boston,	10	250,000	.2185
Brockton,	7	4,480	.3572
Brookline,	6	21,000	.5032
Cambridge,	10	70,000	.6776
Charlestown,	10	50,000	.7319
Chelsea,	6	18,000	.6746
Chicopee,	15	4,500	.6727
Citizens' (Lynn),	—	² —	—
Citizens' (Quincy),	—	² —	—
Citizens' (Wakefield),	3	2,859	.7157
Clinton,	8	2,800	.4110
Cottage City,	—	² —	—
Danvers,	—	² —	—
Dedham,	2	2,000	.3145
Dorchester,	6	24,000	.5554
East Boston,	12	26,400	.8433
Easthampton,	10	3,000	.9836
Fall River,	7	20,160	.4990
Fitchburg,	10	6,000	.5143
Gloucester,	8	³ 4,984	.5308
Great Barrington,	—	² —	—
Greenfield,	6	3,000	.7035
Haverhill,	10	7,500	.2082
Ipswich,	—	² —	—
Jamaica Plain,	8	16,000	.6653
Lawrence,	8	32,000	.4850
Leominster,	5	2,500	1.6063
Lexington,	2	400	.5367
Lowell,	12	60,000	.3507
Lynn,	5½	16,500	.3886
Malden,	6	10,200	.4400
Manufacturers' (Fall River),	22	11,000	.9393
Marblehead,	6	2,400	.7909
Marlborough,	5	2,500	.7511
Milford,	8	5,784	.8584
Miller's River (Athol),	—	² —	—
Mutual (Southbridge),	8	1,200	.8479

¹ In addition to the dividend a rebate is allowed to mills holding stock on the gas used by them.

² No dividend declared.

³ An additional dividend of four per cent. was declared from earnings of wharf property.

NAME OF COMPANY.	Rate per cent.	Amount of Dividends.	Amount per Thousand Sold.
Nantucket,	5	\$1,800	\$0.8491
Natick,	9	1,800	.6726
New Bedford,	9	20,250	.5017
Newburyport,	6	4,800	.5871
Newton,	8	16,000	.4217
North Adams,	8	4,000	.3035
North Attleborough,	8	5,448	.5284
Northampton,	6	3,000	.3443
Norwood,	—	1 —	—
Pittsfield,	15	10,000	.7387
Plymouth,	7	2,800	.7697
Roxbury,	10	60,000	.4412
Salem,	6	18,000	.4985
South Boston,	7 $\frac{1}{2}$	33,000	.6005
Spencer,	—	1 —	—
Springfield,	10	50,000	.8221
Taunton,	10	8,000	.2817
Waltham,	6	7,900	.3207
Westfield,	8	4,320	.8938
Woburn,	9	4,059	.6033
Worcester,	9 $\frac{1}{2}$	47,500	.5904
	—	\$994,793	—

¹ No dividend declared.

PRICE OF GAS.

Between June 30, 1886, and June 30, 1887, the following companies have made reductions in the price of gas : —

Boston,	Natick,
Clinton,	New Bedford,
Danvers,	Newburyport,
East Boston,	North Adams,
Easthampton,	North Attleborough,
Fall River,	Roxbury,
Gloucester,	Salem,
Ipswich,	South Boston,
Lawrence,	Taunton,
Lowell,	Holyoke,
Lynn,	Webster,
Manufacturers' (Fall River),	Middleborough.

The following pages show the price charged by the several companies June 30, 1887, the average candle-power as shown by the tests made by the State Inspector of Gas, and the average price per thousand feet sold by meter, received in the two years ending the 30th of June, 1887.

The gas made is coal-gas, except where otherwise noted.

NAME OF COMPANY.	Average Candle- Power.	Gross Price.	REMARKS.	Average price, 1886-7.	
				1885-6.	1886-7.
Adams,	16.60	\$3 00	20 per cent. discount if paid at the office within 5 days from date of bill,	2 46	\$2 40
Arlington,	16.63	3 00	. . . . .	3 00	3 00
Attleborough,	16.86	2 25	. . . . .	2 25	2 25
Beverly,	17.53	3 00	Discount 10 per cent. on 1,000 feet and 20 per cent. on 10,000 feet burned in one quarter and paid within ten days from presentation of the bill	2 86	2 61
Boston,	18.99	1 40	Discounts made at the end of the year to consumers of \$1,000 worth and upwards, according to a sliding scale.	1 48	1 46
Brockton,	16.98	2 25	To some large consumers \$2 00,	2 16	2 25
Brookline,	17.95	2 20	25 cents per M allowed if paid within 25 days; to large consumers 35 cents, to large-est 50 cents, per M allowed.	2 42	2 18
Cambridge,	17.59	2 00	. . . . .	1 73	1 71
Charlestown,	17.79	2 00	25 cents per M discount if paid in 15 days. Coal-gas and water-gas,	1 73	1 72
Chelsea,	18.54	2 20	\$2 net per M to parties using over \$300 worth of gas per annum,	2 37	2 14
Chicopee,	17.46	2 50	50 cents per M discount for payment within 10 days,	2 28	2 25
Citizens' (Quincy),	16.70	3 00	Discount of 50 cents per M given when large amount is consumed,	2 46a	2 44a
Citizens' (Wakefield),	17.36	3 50	Discount of 50 cents per M to large consumers,	3 38	3 37
Clinton,	17.86	2 50	5 per cent. discount on all bills paid before the 10th of the month,	2 12	2 19
Codage City,	17.60	2 20	20 cents per M discount. Water-gas,	—	3 26
Danvers,	16.85	3 50	25 cents per M if paid by the 15th of the month,	3 09b	2 77
Dedham,	17.23	3 25	Discount of 50 cents per M if paid before the 16th of the month; large consumers, price \$2.50; if more than 1,000,000 feet is used in year, \$2.25.	2 77	2 57
Dorchester,	17.89	2 70	50 cents per M discount on bills paid within 10 days,	2 48	2 23
East Boston,	17.35	1 75	63 per cent., discount, making net price \$2.80. To the town, and consumers using 50,000 feet a year, the bills are made at \$2.50 per M, with a discount of 4 per cent., making \$2.40 net.	1 96	1 81
Easthampton,	17.70	3 00	25 cents discount per M if bills are paid by the 15th of the month. On bills of less than \$1,000 only 10 cents is allowed. Large consumers \$1.75, with discount of 25 cents as above.	2 79	2 70
Fall River,	17.04	2 00	Some special contracts,	1 84	1 76
Fitchburg,	17.70	2 00	20 per cent. discount on bills paid within 15 days,	2 17	1 92
Gloucester,	17.80	2 50	Discount on bills of \$15 per month 5 per cent., on bills of \$40 per month 10 per cent.	2 24	2 01
Greenfield,	18.03	2 75	. . . . .	2 06	2 66

Haverhill,	17.67	1 80	Discount of 20 cents per M if paid at the office within 10 days,	1 68	1 60
Jamaica Plain,	17.34	3 25	Discount of \$1 per M if paid within 15 days; city public buildings 5 per cent. off net price.	2 40	2 24
Lawrence,	18.13	1 70	10 cents per M discount if paid by the 15th of the month; between 250,000 and 800,000 feet a year \$1.50, less 10 cents; over 800,000 feet a year, \$1.30 net.	1 48	1 45
Lowell,	17.80	1 50	30 cents per M discount on bills paid on or before the fifth business day of each month.	1 38	1 29
Lynn,	17.70	2 00	20 cents per M discount if bills are paid within 10 days of date of bill; \$1.50 to gas engines. Coal-gas and water-gas.	2 00	1 81
Malden,	17.60	2 50	Discount 25 cents per M if paid by 20th of the month. Factories and large consumers 50 cents, 75 cents and \$1 per M discount.	2 33	2 16
Manufacturers' (Fall River),	17.72	2 00	Discounts: On less than 500 feet per month, 10 cents per M; on more than 500 feet, 25 cents per M; mills and large consumers, 50 cents per M.	1 78	1 70
Marblehead	16.95	3 50	Discount 50 cents per M,	2 90	2 84
Marlborough,	17.60	3 00	5 per cent. to large consumers. A few special contracts,	2 86	2 67
Milford,	16.70	2 00	5 per cent. discount on all bills exceeding \$30 a month,	1 96	1 98
Miller's River (Athol),	20.90	3 00	50 cents per M discount if paid within 20 days; also 5 per cent. additional to small mills, etc., and 10 per cent. to large mills, etc. Water-gas.	2 46	2 41
Nantucket,	17.35	3 00	Discount 10 cents per M if paid within 10 days; to consumers using 10,000 feet per quarter, 20 cents per M.	3 00	2 95
Natick,	18.25	2 70	Discount 10 per cent. if bill is paid within 5 days; to consumers of 4,000 feet monthly, 25 per cent.	2 80	2 81
New Bedford,	17.20	2 00	For prompt payment, to general consumers, 10 per cent.; to large consumers, 20 per cent.	1 71	1 62
Newburyport,	18.26	2 50	Discount of 25 cents per M for prompt payment; for a yearly consumption of 100,000 feet, \$2.10; of 200,000 feet, \$2; of 300,000 feet, \$1.90; of 500,000 feet, \$1.75.	2 43	2 23
Newton,	17.71	2 50	\$2.15 and \$1.85.	2 31	2 19
North Adams,	18.65	2 25	Discount to consumers of more than 1,000 feet and less than 25,000 feet a month, 5 per cent.; more than 25,000 feet a month, 10 per cent.	2 10	2 07
Northampton,	17.82	2 25	Discount of 50 cents per M if paid before the 15th of the month.	2 39	2 22
North Attleborough,	17.12	2 75	Discount of 30 cents per M if paid within 15 days. Special rates to large consumers.	2 63	2 46
Norwood,	19.25	3 00	Less than 1,000 feet per month, 10 per cent.; over 1,000 feet and less than 50,000 feet, 20 per cent.; over 50,000 feet, 25 per cent.	2 64	2 61
Pittsfield,	19.85	2 50	Special rates to large consumers.	2 08	2 03
Plymouth,	17.15	2 50	City of Boston, on gas registered by meters, and to consumers of over \$500 worth per year, 5 per cent.	2 33	2 26
Roxbury,	18.25	1 75	10 per cent. discount if bill is paid in 15 days,	1 75	1 75
Salem,	18.10	2 00		2 01	1 80

a Includes street lamps.

b For six months, to June 30, 1886.

NAME OF COMPANY	Average Candle- Power.	Gross Price.	REMARKS.	Average price, 1885-6.	Average price, 1886-7.
South Boston,	17.76	\$2 00	Discount of 10 per cent. if bill is paid by the 18th of the month,	\$1 97	\$1 72
Spencer,	15.15	1 25	Discounts : 10 per cent. on bills over \$600 a year ; 5 per cent. on bills less than \$600,	2 08	1 95
Springfield,	18.29	2 00	for prompt payment.		
Taunton,	18.03	1 65	Over 125,000 feet a quarter, \$1.45,	1 47	1 59
Waltham,	17.44	2 50	Discount of 50 cents per M for payment by 15th of the month,	1 81	1 84
Westfield,	17.66	2 50	Discount of 5 per cent. if bills are paid within 5 days, and 10 per cent. if the bills of	2 74	2 33
Woburn,	17.53	2 20	the year amount to 50,000 feet.		
Worcester,	17.93	2 25	20 cents discount per M if paid by the 15th of the month,	2 04	2 00
			20 per cent. discount if paid on or before the 15th of the month. Coal-gas and	1 92	1 82
Holyoke,	18.02	2 00	water-gas.		
			5 per cent. discount to general consumers and 12½ per cent. to mills and manufactur-	2 10	1 94
Ware,	17.93	3 00	ers if paid within 5 days.		
Webster,	18.00	3 00	Public institutions \$2,	2 94	2 93
Amesbury,	26.80	3 25	10 per cent. allowed on bills of 1,000 feet a month and over,	3 53	3 16
Amherst,	38.45	6 00	Oil-gas, with 33½ per cent. of air. Since August, water gas,	3 25	3 25
			Discounts : If bill amounts to \$5 per month, 5 per cent. ; to \$10, 10 per cent. ; to \$20,	5 60	5 36
			15 per cent. ; to \$50, 20 per cent. ; to \$75, 25 per cent., if paid within 10 days. Oil-		
Great Barrington,	25.65	4 85	gas, with 5 to 8 per cent. of air.		
Ipswich,	26.95	3 50	Oil-gas, with 30 per cent. of air.	3 55	4 47
Leominster,	26.60	5 00	\$2.50. Oil-gas, with 25 per cent. of air,	3 56	2 72
			10 per cent. discount if 10,000 feet are used in one month. Special rate to one large	5 00	5 08
Lexington,	26.30	6 00	consumer for gas used for heating. Oil-gas, with 50 per cent. of air.		
			Discount 10 per cent. for prompt payment. A few large consumers are allowed a	5 40	5 11
Mutual (Southbridge),	24.35	3 00	special rate. Oil-gas, with about 33½ per cent. of air.		
			5 per cent. on all gas consumed over 2,000 feet a month for hotel and mechanical	3 31	3 00
Chicopee Falls,	27.90	5 00	purposes. Oil-gas, with from 30 to 40 per cent. of air.		
Lee,	55.50	7 50	Large consumers \$4. Oil-gas, with about 30 per cent. of air,	4 62	4 45
Middleborough,	25.10	4 00	Pure oil-gas,	7 50	7 50
			Oil-gas, with about 40 per cent. of air,	4 33	a

a Not returned.

In the preceding table the Citizens' Steam and Gas Light Company of Lynn is omitted. This company makes only fuel gas (non-illuminating water gas), and has sold a portion of its make under contracts and a portion at fifty cents a thousand feet.

Within the two and a half years that the Board has been in existence, forty-one companies, or nearly two-thirds of the whole number in active operation in the State, have lowered the price from ten cents to one dollar per thousand feet, and four of the companies have made two reductions.

This reduction is undoubtedly due, in part, to the competition caused by the great activity and energy which has been manifested in everything connected with lighting. The larger share of this enterprise and push has been devoted to the improvement and development of the electric light, and, in a much less degree, in the perfection of lamps for burning kerosene oil, having regard both to the brilliancy of the light and the artistic beauty of the lamp itself. There is another fact, too, that has had an influence in cheapening the price of gas, which is becoming more apparent. It is the policy already adopted by some companies of selling gas at the lowest possible price in order to increase the consumption. Within certain limits and conditions the larger the output of gas the less the price at which it can be produced. In other words, there is more profit to a company in selling a very large amount of gas at a low price, than in selling a small amount at a high price; and, within reasonable limits, the more the price is reduced the larger the profit. Some of the companies seem to have adopted this policy as a sound business method of making money.

The capitalization of companies is an important factor governing the price of gas. Fortunately for the consumers in this State, a large majority of the companies are conservative in this respect, and but few have watered their stock. The entire capitalization of the companies in active operation in the State, including both capital stock and bonds, is \$11,944,522. The assessed valuation of the companies is \$12,626,208. This conservative course of the Massachusetts gas companies is in striking contrast with that of those in some other localities. In New York city there is a capital of \$40,000,000; Brooklyn, \$12,500,000; Baltimore, \$11,600,000; and Chicago, \$25,000,000.

Not a few of the companies are improving their plants by the introduction of more approved apparatus in the manufacture of gas with a view to lessen its cost. And there is a constant effort made to improve the methods of burning gas for illumination, by which there shall be a greater economy in consumption and a greater efficiency in the light.

The Spencer Gas Company which was organized July 31, 1886, adopted the policy of a large sale at a low price as one of the strongest grounds on which it hoped to attain the greatest success. Spencer is an enterprising business town of about 8,000 inhabitants and largely engaged in shoe manufacturing. The company, which has an electric light plant in connection with its gas plant, started with a capital of \$50,000, which has since been increased to \$75,000, and it has issued bonds to the same amount, making a total of \$150,000 for capital and bonds, nearly all of which was taken by the citizens of the town.

The plant was originally built for the manufacture of a mixed coal and water-gas, but soon after the works were ready for operation they were nearly destroyed by an explosion and fire. For several months after the plant was rebuilt the company made straight coal-gas.

The object of the company, as already stated, was to sell the largest amount of gas possible, and the price was fixed at \$1.25 per thousand feet. In addition to the low price charged, personal efforts were made to introduce the gas for heating and cooking as well as for illumination. The president of the company, its most enthusiastic promotor, had a series of exhibitions at his residence, to show the possibilities of gas for heating and cooking and the convenience and comfort there are in banishing from one's residence wood and coal as fuel.

To these exhibitions a large number of the citizens of the town were invited. In addition to this, the company rented a large store, centrally located, and stocked it with the most approved gas stoves, which were sold to consumers of gas at first cost. Ordinary coal cooking-stoves were also converted into gas stoves by inserting perforated gas pipes in the fire-box and surrounding them with broken fire-brick. As the results of these efforts, in a few weeks,

time ninety gas stoves were introduced. Some families use no other fuel.

The company began business in March, 1887, and the length of time it has been in operation is not sufficient to determine the degree of the success of the enterprise.

The average price to consumers for coal-gas of twenty companies, making annually more than 30,000,000 feet each, is \$1.586 per thousand feet. The average price of the remainder of the coal-gas companies is \$2.168, making an average for all of \$1.659 per thousand. The average price of oil gas is \$4.13 per thousand feet. The average of prices of gas in one hundred and twenty-two of the leading cities in the United States and Canada (omitting those in this State), as given in a chart compiled by Mr. Emerson McMillin of Columbus, Ohio, and published in September, 1887, was \$1.85 per thousand feet. From these facts it appears that the prices of gas in this State compare very favorably with those elsewhere.

The following table shows the amount of gas made in the year ending June 30, 1887, and in the year ending June 30, 1886; the amount sold by meter and to public lamps in both these years; the amount used at works and offices; and the amount of gas unaccounted for during the year ending June 30, 1887, and the percentage of unaccounted-for gas both years:—

Coal-Gas Companies.

NAME OF COMPANY.	Gas Made Year Ending June 30, 1887.	Gas Made Year Ending June 30, 1886.	Gas Sold by Meter Year Ending June 30, 1887.	Gas Sold by Meter Year Ending June 30, 1886.	Gas Sold for Public Lamps Year Ending June 30, 1887.	Gas Sold for Public Lamps Year Ending June 30, 1886.	Gas Used at Works and Offices Year Ending June 30, 1887.	Gas Unac- counted for Year Ending June 30, 1887.	Percentage unaccount- ed for, 1886-7.	Percent- age unac- counted for, 1885-6.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.		
Adams,	6,690,000	5,775,000	5,347,080	4,847,000	625,000	500,000	15,000	672,420	10.10	7.44
Arlington,	7,082,720	7,233,300	4,362,000	4,813,000	905,500	592,000	96,000	1,538,720	21.99	25.79
Attleborough,	5,995,000	5,448,300	3,404,800	4,474,000	—	—	143,500	1,468,700	27.46	16.41
Beverly,	6,257,800	5,608,380	4,044,300	3,666,000	452,000	432,000	80,000	1,481,000	26.87	27.70
Boston,	1,140,171,200	1,100,999,700	1,070,911,270	978,848,300	—	—	—	72,001,600	6.34	6.58
Brockton,	16,865,800	15,163,000	12,199,400	11,174,300	340,600	544,320	257,000	4,057,000	24.10	20.45
Brookline,	47,912,000	45,370,000	29,034,300	26,043,700	12,692,300	11,771,220	342,100	6,843,744	13.48	13.68
Cambridge,	111,900,000	104,497,000	88,042,985	81,162,874	12,911,895	10,739,254	840,200	10,194,920	9.10	11.05
Charlestown,	78,209,000	75,909,000	52,830,773	49,339,960	15,400,840	17,000,370	882,300	9,105,087	11.62	11.45
Chelsea,	24,742,000	21,242,000	22,200,340	20,670,300	4,292,519	4,101,750	535,614	7,325,927	21.06	19.31
Chilmark,	7,984,720	6,986,600	6,251,100	5,437,000	437,476	300,500	60,000	1,256,174	15.42	15.93
Citizens' (Oxbury),	6,577,700	5,600,000	3,455,200	3,204,300	1,340,000	1,157,300	242,000	1,299,000	19.73	6.90
Citizens' (Wakefield),	5,695,700	5,141,600	3,696,000	3,702,000	298,750	286,000	117,300	1,407,566	26.60	20.40
Clinton,	8,137,870	8,655,840	6,742,400	6,293,242	39,003	648,240	250,580	1,075,887	13.22	19.81
Danvers,	1,648,000	1,684,700	1,074,000	1,050,000	—	670,000	—	675,400	40.80	33.53
Dedham,	7,777,300	7,092,100	5,508,900	4,874,000	848,792	809,100	788,000	1,229,768	15.83	25.03
Dorchester,	50,125,400	45,709,100	24,916,400	22,370,000	18,250,776	17,024,677	289,200	6,030,024	13.22	11.84
East Boston,	24,300,000	32,925,000	19,292,200	18,695,100	12,013,893	12,005,221	295,000	2,788,805	8.12	6.04
Easthampton,	3,601,800	4,818,700	2,851,800	3,837,000	198,200	190,000	25,000	610,840	16.70	15.40
Fall River,	46,303,000	44,397,000	37,655,200	35,141,100	2,858,673	3,153,107	359,000	5,641,147	12.15	13.03
Fitchburg,	12,877,000	12,132,100	10,868,400	9,700,200	797,204	713,800	380,000	832,200	6.46	6.46
Glastonbury,	10,208,000	10,208,000	8,082,400	8,204,800	707,264	741,100	100,000	1,386,735	12.75	9.86
Greenfield,	5,298,500	5,882,000	3,524,300	3,871,400	229,000	297,725	104,000	1,429,800	19.45	20.62
Haverhill,	38,000,000	36,016,000	23,220,000	21,501,100	2,804,100	2,086,000	225,000	1,840,300	4.84	4.38
Jamaica Plain,	28,592,000	28,127,200	15,147,300	13,991,600	8,899,158	8,792,779	600,000	3,946,462	13.88	11.43
Lawrence,	75,775,865	71,224,800	46,980,275	41,827,764	—	838,248	415,200	7,380,300	10.00	11.18
Lowell,	181,906,000	163,799,000	103,167,000	144,076,300	7,801,400	7,109,700	1,812,300	9,124,000	5.01	6.12
Lynn,	46,820,200	39,986,300	33,156,800	33,156,800	2,465,800	2,211,700	748,400	7,561,000	14.89	16.60
Malden,	25,911,900	25,716,700	20,321,300	19,087,700	2,839,400	2,944,000	240,300	3,480,900	12.90	13.63
Manufacturers' (Fall River),	12,922,400	11,082,400	10,897,450	9,746,700	843,000	912,000	137,000	1,474,600	9.02	11.72
Marblehead,	3,610,000	3,892,500	2,748,871	2,948,094	285,000	290,188	136,200	439,229	12.16	10.98
Marlborough,	4,220,800	4,288,000	3,186,400	3,177,200	111,840	205,555	134,500	758,120	17.09	10.99

Milford,	7,283,550	6,976,360	6,276,900	5,984,100	461,000	589,000	50,000	495,650	6.80	5.47
Miller's River (Athol),	2,400,000	2,174,500	1,755,000	1,699,500	390,000	635,000	60,000	195,000	8.12	8.51
Nantucket,	2,381,000	2,447,210	1,062,600	1,061,640	457,120	426,000	42,500	218,730	9.18	12.93
Natick,	2,974,500	2,999,800	2,561,200	2,537,000	114,900	129,600	99,900	198,500	6.67	6.27
New Bedford,	44,514,100	43,608,300	34,458,500	32,383,500	5,900,000	7,100,000	400,000	3,755,600	8.43	8.65
Newburyport,	9,336,030	8,612,424	7,108,100	6,405,800	106,700	1,120,500	238,000	922,930	9.86	9.64
Newton,	42,276,500	39,399,900	31,216,800	28,663,395	6,722,400	6,244,000	416,800	3,970,500	9.17	10.42
North Adams,	15,131,400	13,739,100	11,334,400	10,318,200	1,842,000	1,551,000	385,000	1,570,000	10.37	10.42
Northampton,	9,905,200	9,442,100	8,711,800	7,980,577	—	306,644	60,000	1,223,400	12.24	11.17
North Attleborough,	11,718,650	11,764,622	10,310,500	9,371,400	—	778,600	202,900	1,205,250	10.28	12.29
Norwood,	c	c	793,250	484,200	c	c	c	c	—	—
Pittsfield,	13,997,000	14,276,000	11,517,700	10,825,500	1,173,000	1,800,000	210,000	1,096,300	7.83	10.09
Plymouth,	3,993,940	3,907,220	3,325,500	3,243,000	311,175	394,674	89,000	207,265	5.26	4.88
Roxbury,	d 147,382,000	133,846,000	106,416,931	96,253,000	29,583,222	30,663,300	782,200	10,591,647	7.18	4.69
Salem,	42,684,000	42,111,000	34,167,800	32,390,500	1,940,619	4,312,437	211,900	6,393,681	14.90	12.19
South Boston,	60,309,000	55,768,920	42,670,991	38,069,200	12,280,568	12,079,243	341,000	5,016,451	8.31	9.49
Spencer, ^e	—	—	—	—	—	—	—	—	—	—
Springfield,	67,213,000	61,506,000	55,981,000	52,958,200	3,726,000	3,682,000	696,000	6,870,000	10.22	6.99
Taunton,	29,620,000	25,396,040	27,256,700	22,004,400	1,266,700	1,100,000	604,400	492,200	1.66	4.46
Waltham,	26,225,400	21,256,800	23,345,800	18,747,500	1,283,460	1,398,800	334,000	1,262,140	4.81	4.31
Westfield,	5,494,600	5,519,300	4,324,900	4,274,950	698,000	519,520	57,000	604,700	11.00	12.13
Woburn,	7,385,400	6,325,000	6,074,150	5,199,400	303,298	597,989	139,400	488,572	6.61	8.74
Worcester,	87,613,600	81,807,700	75,663,100	69,443,000	4,785,600	5,138,100	925,200	6,233,700	7.11	7.83
Holyoke,	42,936,700	41,231,000	38,216,200	36,021,000	411,940	391,000	433,700	3,874,860	9.02	10.56
Ware,	4,276,030	4,171,750	f 3,691,800	3,489,100	232,885	184,627	64,300	287,045	6.71	10.32
Webster,	2,230,570	2,150,760	g 1,193,500	1,079,100	245,000	200,900	71,900	820,170	36.76	37.30

Oil-Gas Companies.

Amesbury,	As04,800	888,130	697,280	709,275	11,000	16,000	—	156,320	18.09	11.58
Athol,	i	710,000	731,403	670,000	42,399	40,000	—	—	—	—
Great Barrington,	j	705,250	422,900	639,800	—	—	—	—	—	9.28
Ipwich,	k	1,162,250	1,102,250	1,331,200	—	—	—	—	—	—
Leicester,	l	1,652,475	1,257,040	1,072,600	399,692	394,270	25,000	266,368	14.49	15.16
Lexington,	m	730,000	643,210	560,000	200,000	200,000	10,000	30,000	3.82	—
Mutual (Southbridge),	n	1,367,755	1,223,300	1,028,000	192,000	192,000	—	162,000	10.27	10.80
Chicopee Falls,	o	1,608,763	750,300	734,210	—	—	—	—	—	—
Lee,	p	267,100	265,652	866,650	—	—	—	33,448	14.10	—
Middleborough,	q	1,092,725	—	—	—	13,000	—	—	—	12.27

^a For 6 months to June 30, 1886. ^b For 4 months. ^c Quantity not given. ^d Includes 1,769,000 feet bought from the Boston Gas Light Company. ^e Works only three months in operation. ^f Includes 2,130,300 feet used in the mills of the company. ^g Includes 355,000 feet used in the mills of the company. ^h Quantity of gas bought. ⁱ Quantities not given. ^j Quantity of gas used in the mills of the company not known.

The following table shows the greatest and least daily output of each of the companies and the dates of the same :—

NAME OF COMPANY.	Greatest Output.	Date.	Least Output.	Date.
Adams,	1—	—	—	—
Amesbury,	2—	—	—	—
Amherst,	2—	—	—	—
Arlington,	34,320	Dec. 24,	9,020	July 12
Attleborough,	30,000	Jan. 28,	5,500	May 22
Beverly,	34,100	Dec. 24,	8,700	June 25
Boston,	5,685,866	Dec. 24,	918,006	June 26
Brockton,	75,900	Dec. 23,	17,000	July 25
Brookline,	209,800	Dec. 24,	65,000	June 20
Cambridge,	542,000	Dec. 24,	101,400	July 6
Charlestown,	355,000	Dec. 23,	112,000	Aug. 15
Chelsea,	152,000	Dec. 25,	41,000	June 12
Chicopee,	54,000	Dec. —	8,000	July 14
Citizens' (Quincy),	2—	—	—	July —
Citizens' (Wakefield),	32,276	Nov. 18,	6,475	Aug. 1
Clinton,	1—	—	—	—
Cottage City,	25,000	Aug. —	1,000	Jan. —
Danvers,	7,522	Jan. 8,	1,796	July 6
Dedham,	47,646	Nov. 29,	6,740	Aug. 8
Dorchester,	215,600	Dec. 24,	66,250	July 7
East Boston,	156,390	Dec. 24,	49,030	July 18
Easthampton,	25,000	Dec. 20,	5,500	July 25
Fall River,	308,400	Jan. 24,	49,800	June 5
Fitchburg,	72,600	Dec. 24,	10,100	July 11
Gloucester,	2—	—	—	—
Great Barrington,	2—	—	—	—
Greenfield,	29,300	Dec. 24,	5,000	July 5
Haverhill,	210,000	Dec. 31,	49,000	June 30
Ipswich,	3—	—	—	—
Jamaica Plain,	116,410	Dec. 2,	40,400	July 6
Lawrence,	401,627	Dec. 16,	41,428	July 4
Leominster,	1—	—	—	—
Lexington,	1—	—	—	—
Lowell,	1,218,000	Dec. 24,	132,000	July 4
Lynn,	271,700	Dec. 24,	48,400	July 11
Malden,	122,300	Dec. 14,	26,500	July 9
Manufacturers' (Fall River),	97,300	Dec. 16,	12,300	May 8
Marblehead,	22,071	Dec. 22,	3,721	June 5
Marlborough,	22,000	Dec. —	4,000	June —
Milford,	45,120	Dec. 24,	7,500	June 26
Miller's River (Athol),	16,000	Dec. —	900	June —
Mutual (Southbridge),	2—	—	—	—
Nantucket,	12,700	Aug. 27,	3,010	April 2
New Bedford,	219,300	Dec. 23,	56,100	June 5
Newburyport,	54,680	Dec. 24,	10,700	July 6
Newton,	206,300	Dec. 25,	49,200	July 10
North Adams,	88,000	Dec. 24,	16,000	June 27
Northampton,	58,546	Nov. 30,	6,013	Aug. 17

¹ No record kept.² Not returned.³ No station meter.

NAME OF COMPANY.	Greatest Output.	Date.	Least Output.	Date.
North Attleborough, . . .	58,202	Jan. 25,	8,786	Sept. 13
Norwood,	² —	—	—	—
Pittsfield,	62,000	Dec. 24,	23,000	July 20
Plymouth,	20,200	Dec. 24,	5,650	July 4
Roxbury,	699,650	Dec. 24,	174,000	July 11
Salem,	198,000	Dec. 23,	54,000	July 7
South Boston,	288,592	Dec. 24,	90,420	June 12
Spencer,	³ 31,790	Mar. 31,	8,600	Mar. 1
Springfield,	369,000	Dec. 25,	65,000	July 12
Taunton,	¹ —	—	—	—
Waltham,	170,000	Dec. 8,	22,400	June 5
Westfield,	29,300	Dec. 24,	6,100	Aug. 1
Woburn,	37,000	Dec. 30,	12,000	July 7
Worcester,	490,600	Dec. 24,	100,400	June 12
Chicopee Falls,	¹ —	—	—	—
Holyoke,	244,051	Dec. 22,	39,589	July 25
Lee,	² —	—	—	—
Middleborough,	² —	—	—	—
Ware,	35,710	Nov. 8,	2,080	July 12
Webster,	² —	—	—	—

¹ No record kept.² Not returned.³ Works started in March.

The following tables show the total quantity of gas sold during the year ending June 30, 1887; the percentage of increase in sales over the previous year; the capital (including bonds) per thousand feet sold; the average price received for all gas sold during the year ending June 30, 1887, and the average price received the year previous:—

Coal-Gas Companies.

[Boldface figures show decrease.]

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1886-87. Per cent.	Capital per M sold, including Bonds.	Average price received per M for gas sold, 1886-87.	Average price received per M for gas sold, 1886-87.
	Feet.				
Adams,	5,972,089	11.67	\$2.896	\$2.41	\$2.46
Arlington,	5,427,700	14	12.896	3.00	3.01
Attleborough,	5,404,800	20.79	5.032	2.25	2.25
Beverly,	4,496,300	9.71	11.520	2.59	2.84
Boston,	1,067,809,810	3.03	2.185	1.45	1.47
Brockton,	12,540,000	7.00	7.895	2.24	2.12
Brookline,	41,726,656	10.34	9.706	2.18	2.38
Cambridge	100,954,880	9.85	6.776	1.69	1.72
Charlestown,	68,311,613	2.94	7.319	1.72	1.71
Chelsea,	26,682,859	7.70	11.243	2.12	2.31
Chicopee,	6,688,576	14.97	4.485	2.30	2.39
Citizens' (Quincy),	4,765,200	8.26	9.653	2.44	2.46
Citizens' (Wakefield),	3,994,730	.16	23.856	3.36	3.39
Clinton,	6,811,403	.61	5.137	2.19	2.18
Cottage City,	1—	—	—	—	—
Danvers,	974,600	2—	22.573	3.27	3.01
Dedham,	6,357,692	10.12	17.459	2.82	3.00
Dorchester,	43,206,176	8.02	9.258	2.14	2.27
East Boston,	31,306,095	1.90	7.027	1.81	1.91
Easthampton,	3,050,050	24.63	9.836	2.68	2.80
Fall River,	40,393,953	5.48	7.130	1.76	1.83
Fitchburg,	11,665,700	11.37	5.143	1.90	2.14
Gloucester,	9,389,264	3.11	6.635	2.01	2.24
Greenfield,	4,164,500	1.81	11.725	2.59	2.65
Haverhill,	36,024,700	5.20	2.082	1.60	1.68
Jamaica Plain,	24,046,438	5.81	9.981	2.15	2.25
Lawrence,	65,980,275	5.28	6.062	1.43	1.48
Lowell,	171,059,300	12.50	2.923	1.29	1.38
Lynn,	42,452,300	10.55	7.066	1.83	2.00
Malden,	23,180,700	5.12	9.491	2.16	2.31
Manufacturers' (Fall River),	11,710,150	21.23	4.270	1.71	1.77
Marblehead,	3,034,371	7.15	13.677	2.81	2.88
Marlborough,	3,328,240	4.16	15.023	2.70	2.75
Milford,	6,737,900	2.82	10.730	1.98	2.02
Miller's River, (Athol),	2,145,000	2—	27.972	2.40	1.90
Nantucket,	2,119,720	1.53	16.983	2.80	2.82
Natick,	2,676,100	1.49	11.210	2.81	2.91

¹ Quantity not given.

² Previous return for six months only.

Coal-Gas Companies — Concluded.

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1885-'86. Per cent.	Capital per M sold, including bonds.	Average price received per M for gas sold, 1887-'86.	Average price received per M for gas sold, 1885-'86.
	Feet.				
New Bedford, . . .	40,358,500	2.21	\$6.839	\$1.63	\$1.69
Newburyport, . . .	8,175,100	8.48	9.786	2.13	2.29
Newton, . . .	37,939,200	8.68	5.270	2.25	2.36
North Adams, . . .	13,176,400	11.01	4.098	1.96	2.01
Northampton, . . .	8,711,800	4.59	5.739	2.10	2.39
North Attleborough, . .	10,310,500	2.53	13.210	2.47	2.56
Norwood, . . .	793,250	63.82	15.126	2.52	2.65
Pittsfield, . . .	12,690,700	.51	5.739	2.01	2.01
Plymouth, . . .	3,637,675	.83	10.996	2.27	2.51
Roxbury, . . .	136,005,153	7.15	4.412	1.73	1.72
Salem, . . .	36,108,419	1.62	8.308	1.80	2.00
South Boston, . . .	54,951,549	9.59	8.390	1.78	1.91
Spencer, . . .	1—	—	—	—	—
Springfield, . . .	59,707,000	5.41	8.221	1.94	2.09
Taunton, . . .	28,523,400	20.32	2.818	1.59	1.48
Waltham, . . .	24,629,260	22.25	6.902	1.92	1.92
Westfield, . . .	4,832,900	.80	11.173	2.33	2.69
Woburn, . . .	6,727,448	16.04	6.704	2.07	2.15
Worcester, . . .	80,453,700	7.87	6.073	1.82	1.92
Holyoke, . . .	37,727,040	6.15	—	1.97	2.11
Ware, . . .	1,794,385	19.74	—	² 2.55	² 2.91
Webster, . . .	983,500	4.73	—	² 3.33	² 3.60

Oil-Gas Companies.

Amesbury, . . .	708,280	9.80	\$1.764	\$3.25	\$3.25
Amherst, . . .	773,793	8.98	14.862	5.39	5.60
Great Barrington, . . .	422,900	33.90	11.823	4.47	3.55
Ipswich, . . .	1,162,250	12.69	19.789	2.72	3.56
Leominster, . . .	1,546,732	12.33	32.326	5.06	5.00
Lexington, . . .	745,210	2.08	31.228	4.84	4.98
Mutual (Southbridge), . .	1,425,300	16.82	10.598	3.00	3.26
Chicopee Falls, . . .	550,500	49.79	—	⁵ 4.79	⁵ 4.62
I ee, . . .	203,652	⁴ —	—	7.50	7.50
Middleborough, . . .	³ —	—	—	—	4.32

¹ Works in operation only three months. ² Average price for gas sold to the public.

³ Quantity not given.

⁴ Quantity last year not returned.

⁵ Average price to private consumers.

The following tables show the capital (including bonds), the gas sold, the gas unaccounted for, and the number of consumers per mile of main ; also, the gas sold per consumer and per meter light : —

Coal-Gas Companies.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unaccounted for.	Number of Consumers.		
Adams,	\$3,460	Feet. 1,194,416	Feet. 134,584	29.6	Feet. 36,128	Feet. 3,555
Arlington,	3,477	269,682	77,402	16.8	13,340	2,256
Attleborough,	7,727	1,535,453	126,903	58.8	26,105	5,009
Beverly,	8,824	765,979	286,456	60.4	11,392	2,498
Boston,	19,613	8,311,097	562,746	209.7	37,507	3,609
Brockton,	1 -	-	-	-	19,002	3,075
Brookline,	8,106	835,203	116,968	26.6	21,813	2,913
Cambridge,	8,974	1,294,296	130,701	60.0	18,784	3,362
Charlestown,	12,966	1,771,566	236,127	92.4	14,820	3,040
Chelsea,	6,788	603,831	170,199	31.4	16,036	3,014
Chicopee,	6,696	1,490,052	275,932	31.4	44,334	2,889
Citizens' (Quincy),	6,571	680,742	181,414	35.5	13,756	2,915
Citizens' (Wakefield),	4,765	199,731	74,883	15.5	11,844	1,558
Clinton,	6,542	1,273,159	201,100	36.8	34,276	1,793
Cottage City,	2 -	-	-	47.2	-	-
Danvers,	8,301	371,547	254,112	32.8	11,202	1,509
Delham,	9,304	532,916	102,928	23.0	20,032	2,682
Dorchester,	8,364	903,517	138,645	39.0	13,368	2,517
East Boston,	13,090	1,863,458	166,000	73.1	15,697	3,883
Easthampton,	8,241	837,920	169,461	49.7	15,756	1,467
Fall River,	16,695	2,347,476	327,777	58.9	36,927	2,650

	5,474	1,064,390	75,930	46.5	21,310	2,680
Fitchburg,	9,108	1,372,700	202,749	77.4	16,381	3,841
Gloucester,	13,020	1,084,505	268,177	63.2	16,193	3,887
Greenfield,	5,387	2,588,982	132,636	110.4	21,603	3,769
Haverhill,	9,426	944,480	155,757	37.1	15,995	2,562
Jamaica Plain,	14,936	2,463,789	275,593	71.2	34,382	4,781
Lawrence,	7,652	2,618,383	139,666	96.7	25,809	3,422
Lowell,	13,489	1,908,827	340,000	78.6	23,489	4,080
Lynn,	4,813	2,507,125	76,152	28.0	15,876	2,523
Malden,	11,111	2,602,256	261,033	41.5	58,273	2,217
Manufacturers' (Fall River),	12,029	879,527	127,341	58.5	13,608	1,907
Marblehead,	25,000	1,664,120	379,060	78.0	20,425	2,344
Marlborough,	10,616	989,412	72,782	59.0	15,614	2,492
Milford,	23,346	834,630	75,875	45.9	14,873	2,510
Miller's River (Athol),	7,438	437,958	45,192	36.1	9,446	2,240
Nantucket,	8,498	758,102	56,232	52.9	13,696	1,657
Natick,	10,222	1,491,321	139,096	78.7	16,374	3,157
New Bedford,	10,810	1,104,743	124,720	57.4	17,356	2,920
Newburyport,	3,543	672,085	69,450	30.1	18,352	3,168
Newton,	5,775	1,406,226	167,556	42.6	28,336	3,553
North Adams,	5,915	1,030,982	144,781	43.3	23,803	3,514
Northampton,	15,782	1,194,727	139,426	38.2	31,244	4,122
North Attleborough,	1 —	—	—	—	21,169	1,399
Norwood,	8,434	1,712,645	147,948	83.0	18,720	4,751
Pittsfield,	13,513	1,228,942	70,020	70.2	15,992	2,441
Plymouth,	9,063	2,054,464	160,040	86.8	18,507	3,454
Roxbury,	12,082	1,454,225	256,290	91.1	15,091	3,192
Salem,	17,312	2,068,185	188,801	76.7	20,927	4,115
South Boston,	15,690	³ —	—	24.6	—	—
Spencer,	14,116	1,685,686	193,958	78.0	20,259	3,194
Springfield,						

¹ No return of quantity of gas sold. ² Works in operation for three months only.

³ No return of length of mains.

Coal-Gas Companies—Concluded.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold	Gas unaccounted for.	Number of Consumers.		
Taunton,	\$5,141	Feet. 1,833,123	Feet. 31,632	65.8	Feet. 26,617	Feet. 3,208
Waltham,	11,676	1,691,570	86,186	49.2	32,560	4,551
Westfield,	10,609	949,489	118,801	54.7	16,214	3,073
Woburn,	9,761	1,456,157	105,747	77.9	16,872	3,086
Worcester,	14,005	2,253,605	174,613	97.5	21,667	4,279
Holyoke,	—	2,513,460	238,151	73.2	32,775	3,657
Ware,	—	1,952,544	142,808	50.2	34,433	2,730
Webster,	—	575,400	328,068	52.4	9,110	1,865

Oil-Gas Companies.

Amesbury,	\$1,237	701,267	—	79.2	8,716	2,517
Ambors,	3,002	202,035	—	29.5	6,472	1,508
Great Barrington,	4,000	338,320	—	50.4	6,712	1,208
Ipswich,	8,333	421,050	—	28.9	14,528	1,332
Lexington,	7,692	237,359	40,979	30.9	6,154	1,267
Mutual (Southbridge),	9,778	313,113	12,605	36.1	6,339	1,637
Chicopee Falls,	7,978	758,138	86,170	79.7	8,448	1,486
Lee,	—	1,544,554	—	61.3	8,879	1,613
Middleborough,	—	151,281	25,339	53.0	2,909	304
	—	?	—	—	—	—

¹ Includes only gas sold to private consumers.² Owing to the death of the owner of these works the return is very incomplete.

The following table shows the number of tons of coals carbonized in 1886-87 and 1885-86, the kind and quantities of enricher used by the various coal-gas companies, and the percentage of cost of coal received from residuals:—

NAME OF COMPANY.	Number of tons of coal carbon- ized, year ending June 30, 1887.	Number of tons of coal carbon- ized, year ending June 30, 1886.	Enricher used.	Cannel. Tons.	Naphtha. Gallons.	Residuum. Barrels.	Oil. Gallons.	Percentage of cost of coal re- ceived from residual products.
Adams.	666	624	Oil.	—	—	—	—	30.56
Arlington.	652	730	Crude oil.	—	—	—	980	19.69
Attleborough.	639	518	Cannel.	—	—	—	654	16.15
Beverly.	687	714	Cannel coal, albertite, naphtha.	—	—	—	—	22.92
Boston.	100,882	100,755	Naphtha.	2,249	708,238	—	—	31.90
Brookline.	1,593	1,416	Cannel and naphtha.	—	10,966	—	—	24.24
Brookline.	4,038	3,888	Petroleum oil.	168	18,362	—	—	29.88
Cambridge.	9,397	8,760	Naphtha.	—	12,673	—	41,252	33.31
Charlestown.	6,375	6,714½	Gas oil.	—	—	—	—	45.82
Chelsea.	3,548	3,221	Cannel.	15	—	—	10,810	38.44
Chicopee.	724	577	Naphtha, rosin.	—	—	—	—	19.69
Citizens' (Quincy).	625½	441	Oil.	—	—	—	—	10.06
Citizens' (Wakefield).	702	642	—	—	—	—	—	5.37
Clinton.	754	755	—	—	—	—	3,697	22.09
Danvers.	108	8 101	—	—	—	—	—	10.95
Dedham.	708½	760	Residuum.	—	—	12	—	19.31
Dorchester.	4,635	4,026½	Cannel chips, gas oil.	150½	—	—	—	22.68
East Boston.	3,287	3,364	Cannel, residuum.	71	—	69	7,463	28.12
Easthampton.	418	449	Cannel, residuum.	14½	—	—	—	8.54
Fall River.	3,870	4,143	—	—	—	4	—	29.27
Fitchburg.	876	1,066	Naphtha, cannel.	10	27,472	—	—	24.37
Gloucester.	968½	947	Cannel, gas oil.	3¼	—	—	—	32.37
Greenfield.	533	612	Cannel.	12½	—	—	1,933	8.31
Haverhill.	4,089	3,323	—	—	—	—	—	29.76
Holyoke.	3,716	3,543	Cannel.	170	—	—	—	37.09
Jamaica Plain.	2,610	2,588	Cannel.	151	—	—	—	31.04

¹ Not including amount used in the manufacture of water-gas.

² About 11,000 pounds of rosin used.

³ For six months to June 30, 1886.

NAME OF COMPANY.	Number of tons of coal carbonized, year ending June		Number of tons of coal carbonized, year ending June	Enricher used.	Cannel. Tons.	Naphtha. Gallons.	Residuum. Barrels.	Oil. Gallons.	Percentage of cost of coal received residual products.
	30, 1887.	30, 1886.							
Lawrence,	6,361	5,983	Cannel, naphtha, . . . . .	. . . . .	271	8,300	-	-	43.02
Lowell,	17,327	15,171	Naphtha, naphtha, . . . . .	. . . . .	15	69,473	-	-	53.61
Lynn,	4,309	3,863	Naphtha, . . . . .	. . . . .	-	10,267	-	-	35.29
Malden,	2,787 ½	2,218 ½	Cannel, gas oil, . . . . .	. . . . .	34	-	-	5,076	25.63
Manufacturers' (Fall River),	1,081	1,060	Cannel, . . . . .	. . . . .	70	-	-	-	17.56
Marblehead,	3,861 ¼	3,885	Naphtha, gas oil, . . . . .	. . . . .	-	-	-	-	3.10
Marlborough,	368	462	- . . . .	. . . . .	-	11,441	-	5,515	9.10
Milford,	806	757	- . . . .	. . . . .	-	-	-	-	34.73
Nantucket,	237 ¾	240	- . . . .	. . . . .	-	-	-	-	3.63
Natick,	326	303	Naphtha, gas oil, . . . . .	. . . . .	-	49	-	637	26.30
New Bedford,	4,124	4,029	Cannel, naphtha, . . . . .	. . . . .	82	4,170	-	-	47.88
Newburyport,	883	860	Cannel, oil, . . . . .	. . . . .	21 ¼	-	-	2,357	19.73
Newton,	3,678	3,320	Gas oil, . . . . .	. . . . .	-	-	-	25,562	29.43
North Adams,	1,292	1,200	Cannel, naphtha, . . . . .	. . . . .	53	4,716	-	-	21.70
Northampton,	909	814 ½	Cannel, naphtha, . . . . .	. . . . .	23	4,927	-	-	14.11
North Attleborough,	1,061	1,068	Gas oil, . . . . .	. . . . .	-	-	-	1,161	32.83
Norwood,	100	125	- . . . .	. . . . .	-	-	-	-	-
Pittsfield,	1,020 ½	900	Cannel, . . . . .	. . . . .	165	-	-	-	23.48
Plymouth,	352	347	Cannel, residuum, . . . . .	. . . . .	25 ½	-	15 ½	-	4.56
Roxbury,	13,604	12,003	Naphtha, . . . . .	. . . . .	-	84,544	-	-	35.85
Salem,	3,377	3,334	Cannel, . . . . .	. . . . .	336	-	-	-	28.36
South Boston,	5,703	5,190	Cannel, petroleum, residuum, . . . . .	. . . . .	6	-	196	-	34.12
Spencer,	2	-	- . . . .	. . . . .	-	-	-	-	-
Springfield,	5,471	5,060	Cannel, . . . . .	. . . . .	436	-	-	-	37.20
Taunton,	2,868	2,415	Gas oil, . . . . .	. . . . .	7 ½	7,162	-	2,976	15.43
Waltham,	2,454	1,921	Cannel, naphtha, . . . . .	. . . . .	-	-	-	-	27.75
Ware,	446	391	Cannel, . . . . .	. . . . .	38	-	-	-	13.03
Webster,	233	245	- . . . .	. . . . .	-	-	-	-	9.83
Westfield,	470	450	Cannel, oil, . . . . .	. . . . .	66 ¾	-	-	-	28.88
Woburn,	726 ¾	626	Cannel, oil, . . . . .	. . . . .	12	-	-	-	40.20
Worcester,	6,656	6,333	Naphtha, . . . . .	. . . . .	-	169,783	-	5,021	26.58

¹ Not including amount used in the manufacture of water-gas.² Not returned.

The following tables show the materials and quantity of each used in the manufacture of water and oil-gas, also the process used and the quantity of water-gas made : —

Water-Gas.

NAME OF COMPANY.	Process used.	Materials used in Generator.	Quantity used. Tons.	Enricher used.	Quantity used. Gallons.	Gas made Feet.
Charlestown,	Granger,	Coke, .	¹ 180	Naphtha,	49,897	8,548,800
Cottage City, ²	Loomis,	—	—	—	—	—
Lynn,	Granger,	Coke, .	³ —	Naphtha,	14,596	2,564,500
Miller's River (Athol),	Granger,	Anthracite,	⁴ 84	Naphtha,	11,500	2,400,000
Worcester,	Granger,	Coke, .	⁵ 168 }	Naphtha,	94,830	14,891,000
		Anthracite,	106 }			

¹ Coke used for making steam; quantity not known.

² Quantities not given.

³ One to one and a half bushels per thousand feet used in the generator. Coke used for making steam; quantity not given.

⁴ Thirty-six tons of coal used in addition to this, for generating steam.

⁵ About one-sixth of a bushel per thousand feet used for generating steam.

Oil-Gas.

NAME OF COMPANY.	Materials used.	Quantity used. Gallons.	Fuel used.	Quantity used.
Amesbury, ¹	—	—	—	—
Amherst,	Naphtha, .	11,034	Coke,	1,948 bu.
Great Barrington, ¹	—	—	—	—
Ipswich,	Petroleum,	24,000	Franklin coal, .	70 tons.
Leominster,	Petroleum,	18,185	Cumberland coal,	91 tons.
Lexington,	Petroleum,	11,695	Anthracite, . . .	70½ tons.
Mutual (Southbridge),	Petroleum,	9,893	Anthracite, ² . . .	49 tons.
Chicopee Falls,	Petroleum,	20,865	Anthracite, . . .	65½ tons.
Lee,	Petroleum,	4,742	Coke, ³	1,500 bu.
Middleborough,	Gas oil, .	4—	Coke,	—

¹ No gas made.

² Two and a half cords of wood used also.

³ Four cords of wood used also.

⁴ Quantities not returned.

The following table shows the number of retorts, the average number of the same employed in winter and in summer, and the average number of men employed in winter and in summer :—

Coal-Gas Works.

NAME OF COMPANY.	Number of Retorts.	AVERAGE NUMBER OF RETORTS EMPLOYED.		AVERAGE NUMBER OF MEN EMPLOYED.	
		Winter.	Summer.	Winter.	Summer.
Adams,	10	10	5	3	3
Arlington,	11	6	5	6	4
Attleborough,	13	6	3	3	3
Beverly,	11	8	3	4	3
Boston,	762	522	315	528	388
Brockton,	18	11	8	5	5
Brookline,	48	24	12	10	6
Cambridge,	90	52	26	31	25
Charlestown,	72	33 $\frac{1}{2}$	21	15	13
Chelsea,	35	20	15	12	9
Chicopee,	16	10	3	4	2
Citizens' (Quincy),	8	5 $\frac{4}{10}$	2 $\frac{2}{3}$	3	3
Citizens' (Wakefield),	12	6	3	5	4
Clinton,	18	15	3	4	2
Danvers,	4	2	1	2	2
Dedham,	15	10	5	3	2
Dorchester,	58	36	26	29	36
East Boston,	45	22	12	10	6
Easthampton,	9	6	3	2 $\frac{1}{2}$	2
Fall River,	105	37	17	19	10
Fitchburg,	20	10	5	6	4
Gloucester,	15	6	3	5	4
Greenfield,	6	6	3	2 $\frac{1}{4}$	2
Haverhill,	48	25	13	11	9
Jamaica Plain,	30	17	12	10	10
Lawrence,	137	48	24	30	20
Lowell,	144	108	60	121	86
Lynn,	48	26	15	12	9
Malden,	24	18	12	9	7
Manufacturers' (Fall River),	33	18	5	6	2
Marblehead,	9	3	3	3	2
Marlborough,	15	5	3	3	3
Milford,	17	11	6	5	4
Nantucket,	7	3	4	3	3
Natick,	7	3	3	2	2
New Bedford,	42	30	18	15	11
Newburyport,	12	6	3	4	4
Newton,	34	22	12	7	4
North Adams,	19	14	6	5	3
Northampton,	13	12	8	5	4
North Attleborough,	17	5 $\frac{3}{8}$	3 $\frac{1}{2}$	5	4
Norwood,	7	3	3	3	3
Pittsfield,	17	6 $\frac{1}{2}$	5 $\frac{1}{2}$	3	2
Plymouth,	5	3	2	2	2
Roxbury,	145	80	54	50	37

NAME OF COMPANY.	Number of Retorts.	AVERAGE NUMBER OF RETORTS EMPLOYED.		AVERAGE NUMBER OF MEN EMPLOYED.	
		Winter.	Summer.	Winter.	Summer.
Salem,	55	28 $\frac{1}{2}$	18 $\frac{1}{2}$	14 $\frac{1}{2}$	9 $\frac{1}{2}$
South Boston,	108	36	27	22	23 $\frac{1}{2}$
Spencer,	5	5	5	3	3
Springfield,	72	32	19	19	15
Taunton,	35	27	15	14	10
Waltham,	33	21	9	16	16
Westfield,	9	6	3	3	3
Woburn,	12	6	3	5	2
Worcester,	48	35 $\frac{1}{2}$	13	42 $\frac{2}{3}$	28
Holyoke,	36	24	13	13	10 $\frac{1}{2}$
Ware,	7	2	1	5	3
Webster,	6	3	3	2	1

Oil-Gas Works.

Amesbury, ¹	—	—	—	—	—
Amherst,	12	—	—	1	1
Great Barrington, ¹	—	—	—	—	—
Ipswich,	5	—	—	1	1
Leominster,	3	—	—	1	1
Lexington,	4	—	—	1	1
Mutual (Southbridge),	8	—	—	1	1
Chicopee Falls,	12	—	—	1 $\frac{1}{2}$	1
Lee,	4	—	—	1	1
Middleborough,	3	—	—	1	1

¹ Gas bought, not made.

STREET MAINS.

The following table shows the lengths and sizes of the mains as returned by the companies. These figures are probably more nearly correct than those in the last report, which were estimated by many of the companies that have since made measurements. On account of this fact it is quite difficult to determine the increase in the length of street mains: but in comparing those returns of the two years which are apparently correct, there is an increase of more than ten miles of six-inch main and but a few hundred feet of two-inch and smaller pipe, showing a tendency on the part of the companies to lay larger pipe.

NAME OF COMPANY.	DIAMETER IN INCHES.															Total Length in Feet.	LENGTH IN MILES AND FEET.		Increase during Year.	
	1	1 1/4	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	24		Miles.	Feet.		
Adams,	-	-	-	5,280	-	10,560	2,640	7,920	-	-	-	-	-	-	-	-	5	26,400	3,000	
Amesbury,	-	-	-	4,500	-	9,000	-	-	-	-	-	-	-	-	-	-	1	5,600	-	
Amherst,	-	-	-	8,775	-	9,681	-	-	-	-	-	-	-	-	-	-	3	4,416	-	
Attleborough,	-	-	-	-	-	95,000	2,000	9,300	-	-	-	-	-	-	-	-	20	106,300	700	
Beverly,	-	900	-	2,000	-	3,000	9,000	3,614	-	-	-	-	-	-	-	-	3	2,774	114	
Boston,	-	-	-	9,330	-	15,440	5,550	-	550	-	-	-	-	-	-	-	5	18,514	-	
Brookline,	-	-	-	2,391	-	196,943	102,805	210,157	21,676	28,046	67,974	-	-	27,854	3,341	-	128	31,070	4,630	
Brookline,	6,827	12,400	4,631	5,200	-	117,529	62,455	36,200	11,367	4,950	1,120	900	-	-	-	-	40	263,789	9,711	
Cambridge,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77	411,797	2,958	
Charlestown,	-	3,396	-	12,683	-	132,501	24,064	16,820	5,773	2,585	5,531	-	-	-	-	-	38	263,653	3,823	
Chelsea,	-	-	-	5,280	-	95,040	52,800	26,400	52,800	1,000	-	-	-	-	-	-	44	233,320	-	
Chicopee,	-	-	-	5,280	-	5,280	2,640	2,640	-	-	-	-	-	-	-	-	4	2,540	-	
Citizens' (Lynn),	-	-	-	-	250	-	1,700	8,000	9,000	1,023	-	-	-	-	-	-	4	23,660	-	
Citizens' (Quincy),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1,653	-	
Citizens' (Wakefield),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	* 7	22,773	-	
Clinton,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	* 20	-	-	
Cottage City,	-	-	1,375	1,300	-	12,100	5,625	5,850	-	1,280	-	720	-	-	-	-	5	28,250	2,000	
Danvers,	-	-	-	-	-	2,252	5,055	2,013	975	-	-	-	-	-	-	-	5	10,905	-	
Dedham,	-	-	-	2,403	-	7,226	3,750	657	-	-	-	-	-	-	-	-	2	3,476	-	
Dorchester,	-	2,984	-	6,800	-	25,342	8,533	18,681	-	-	-	-	-	75	-	-	11	4,926	2,070	
East Boston,	-	-	-	2,100	-	129,237	74,101	25,700	7,800	8,100	4,900	-	-	-	-	-	47	252,484	9,136	
East Boston,	-	-	-	2,400	-	47,650	32,975	4,400	5,400	950	-	-	-	-	-	-	16	98,075	3,175	
East Boston,	600	-	-	8,490	-	2,300	7,160	500	-	-	-	-	-	-	-	-	3	19,250	-	
Fall River,	-	-	-	-	-	26,434	4,185	36,240	20,549	1,500	-	-	2,200	-	-	-	17	1,348	1,506	
Fitchburg,	-	-	-	4,000	-	41,100	3,600	4,000	5,000	200	-	-	-	-	-	-	10	57,900	2,900	
Gloicester,	-	-	-	-	-	27,675	5,500	1,200	1,000	-	-	-	-	-	-	-	6	36,125	1,325	
Great Barrington,	-	-	750	1,320	-	1,320	3,960	-	200	-	-	-	-	-	-	-	1	6,000	-	
Greenfield,	-	-	-	5,016	-	9,821	2,640	2,640	200	-	-	-	-	-	-	-	3	20,317	6,095	
Haverhill,	-	-	-	7,220	-	39,528	4,800	17,949	-	4,025	-	-	-	-	-	-	13	73,522	60	
Ipswich,	2,000	-	300	10,350	-	930	-	1,000	-	-	-	-	-	-	-	-	2	14,600	60	
Jamaica Plain,	-	-	975	7,125	-	76,587	27,132	11,463	10,575	591	-	-	-	-	-	-	25	134,448	23,448	
Lawrence,	-	-	-	-	-	91,651	6,226	23,182	8,112	2,628	9,163	-	434	-	-	-	26	141,396	5,160	
Leominster,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	* 6	2,640	-	
Lexington,	1,200	1,000	1,400	7,000	-	77,809	65,004	72,062	8,223	7,516	0,681	1,000	48	5,326	3,471	65	12,600	344,970	600	
Lowell,	2,281	485	90,099	90,099	-	35,787	41,182	14,519	3,337	4,562	4,600	-	3,325	-	-	22	65	1,770	43,007	
Lynn,	837	2,409	2,375	4,525	-	-	-	-	-	-	-	-	-	-	-	-	22	1,298	5,644	

METERS.

All of the companies, excepting Middleborough, made returns of the whole number of meters in use the present year; and the last report contains those of the previous year, excepting Lee. There has been an increase of 5,608 meters and 22,332 lights, as represented by the nominal capacity of the meters.

The following table shows the number of meters in use June 30. and the increase during the year.

Boldface figures show decrease.

NUMBER AND SIZE OF METERS.

NAME OF COMPANY.	NUMBER AND SIZE OF METERS.												Total Number in use June 30, 1887.	Increase during the Year.												
	0	1	2	3	5	10	20	30	35	40	45	50			60	80	100	125	150	180	200	250	300	400	500	
Adams,																									148	30
Amsbury,			64	118	12	3	3																		80	6
Amherst,				105		50	18	7																	113	12
Attitash,			1	164	100	31	18	16																	360	30
Attitash,			67	73	31	18	16	2																	207	37
Beverly,			11	280	22	10	14																		26,052	892
Boston,	3	5	395	9,670	9,635	6,333	2,300	1,078																	350	57
Brookline,			35	384	133	67	13	6																	70	8
Brookline,																									3	13
Brookline,																									10	1
Brookline,																									7	1
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1 Return of previous year incorrect.

[illegible]

Total 658,950 lights.

HIGH-POWER GAS LAMPS.

The following table shows the number of Lungren or other high-power gas lamps in use June 30, 1887:—

Adams,	32	Manufacturers' (Fall River),	2
Attleborough,	11	Marblehead (albo-carbon),	35
Beverly,	10	Marlborough,	7
Boston (not known),	—	Milford,	66
Cambridge,	100	Miller's River (Athol),	6
Chelsea,	25	Natick,	20
Chicopee,	2	New Bedford,	20
Citizens' (Quincy),	2	Newburyport,	1
Clinton,	4	Newton,	62
Danvers,	2	North Adams,	81
Dedham,	1	Northampton,	13
Dorchester,	6	North Attleborough,	31
East Boston,	95	Pittsfield,	7
Fall River,	32	Plymouth,	31
Fitchburg,	7	Roxbury (not known),	—
Gloucester,	8	Salem,	5
Haverhill,	2	South Boston,	5
Holyoke,	1	Springfield,	12
Jamaica Plain,	2	Taunton,	26
Lawrence,	179	Waltham,	18
Lowell,	2	Westfield,	8
Lynn,	3	Woburn,	10
Malden,	110	Worcester,	12

GAS STOVES.

But very little definite information is given by many of the companies in answer to the question about gas stoves. A few companies have evidently paid some attention to this branch of the gas business, and apparently with encouraging results. Gloucester has 110 gas stoves, Lawrence 225, Lowell 442, New Bedford 480, Springfield about 900, Taunton 102 and Waltham 119. Most of these companies lease stoves.

PUBLIC LAMPS.

Compared with the returns for the year ending June 30, 1886, these returns show a net decrease in the number of public lamps supplied by the coal-gas companies of 1,091, and of those supplied by the oil-gas companies of 2. This large loss is due to the growing use of the electric light for street-lighting.

The following table shows the number of lamps supplied, the increase or decrease during the year, the average price per thousand feet received from gas used in street lamps, and also the cost per thousand of the care of the lamps when this is done by the companies.

Public Lamps — Coal-Gas.

NAME OF COMPANY.	No. of Lamps Supplied.	INCREASE OR DECREASE IN NO. DURING YEAR.		Average price received per M.	Expense of Lighting and care of Lamps per M.
		In-crease.	De-crease.		
Adams,	63	—	—	\$2.5200	—
Arlington,	147	—	—	3.0000	—
Attleborough,	—	—	—	—	—
Beverly,	53	—	19	2.4000	—
Boston,	3,460	—	40	1.3840	—
Brockton,	48	—	12	2.0000	\$0.7722
Brookline,	759	—	29	2.1609	.2725
Cambridge,	945	20	—	1.5165	—
Charlestown,	1,009	—	48	1.6941	.0073
Chelsea,	513	23	—	2.0000	—
Chicopee,	75	2	—	2.9990	—
Citizens' (Quincy),	123	23	—	2	—
Citizens' (Wakefield),	85	2	—	3.3659	—
Clinton,	6	—	68	2.3303	—
Cottage City,	15	1	—	2	—
Danvers,	—	—	—	—	—
Dedham,	105	—	86	4.1932	1.3840
Dorchester,	1,208	58	—	2.0000	—
East Boston,	701	—	87	1.8047	—
Easthampton,	56	4	—	2.4525	—
Fall River,	320	20	—	1.6763	—
Fitchburg,	67	1	—	1.6640	—
Gloucester,	97	—	12	2.0000	—
Greenfield,	6	—	47	2.5000	—
Haverhill,	319	4	—	1.5702	—
Jamaica Plain,	569	9	—	2.0000	—
Lawrence,	—	—	—	—	—
Lowell,	758	—	97	1.2788	—
Lynn,	290	—	5	1.8325	.0130
Malden,	392	—	33	2.1161	.2690
Manufacturers' (Fall River),	94	3	—	1.7428	—
Marblehead,	67	6	—	2.5000	1.0320
Marlborough,	13	—	29	3.2962	—
Milford,	61	—	2	2.0000	.5727
Miller's River (Athol),	48	6	—	2.3782	.4794
Nantucket,	72	1	—	2.2863	.3491
Natick,	17	2	—	2.8342	—
New Bedford,	440	—	—	1.6407	.3918

¹ Commenced operations during year.

² Amount received from public lamps not given separately.

NAME OF COMPANY.	No. of Lamps Supplied.	INCREASE OR DECREASE IN NO. DURING YEAR.		Average price received per M.	Expense of Lighting and care of Lamps per M.
		In- crease.	De- crease.		
Newburyport,	150	—	—	\$1.4430	—
Newton,	812	—	133	2.5356	\$0.8855
North Adams,	100	15	—	1.3028	.3257
Northampton,	—	—	87	—	—
North Attleborough,	—	—	80	—	—
Norwood,	—	—	—	—	—
Pittsfield,	70	—	10	1.9023	.5070
Plymouth,	41	—	9	2.4058	.8227
Roxbury,	1,846	1	—	1.6330	—
Salem,	107	—	377	1.8000	.0043
South Boston,	806	26	—	1.8320	—
Spencer,	—	—	—	—	—
Springfield,	486	31	—	1.8000	—
Taunton,	162	7	—	1.6238	—
Waltham,	180	—	46	—	—
Westfield,	34	—	28	2.2500	—
Woburn,	81	2	—	2.6933	.6697
Worcester,	644	—	56	1.8000	—
Holyoke,	83	² —	—	2.5000	—
Ware,	68	3	—	2.7500	—
Webster,	40	9	—	3.8517	.9245
	18,711	—	—	—	—
<i>Oil-Gas.</i>					
Amesbury,	—	—	1	\$3.2500	—
Amherst,	25	—	—	6.0000	—
Great Barrington,	—	—	—	—	—
Ipswich,	—	—	—	—	—
Leominster,	108	2	—	5.0000	—
Lexington,	85	—	—	4.0800	\$0.0075
Mutual (Southbridge),	43	—	—	3.0000	—
Chicopee Falls,	18	—	—	—	—
Lee,	¹ —	—	—	—	—
Middleborough,	—	—	3	—	—
	279	—	—	—	—

¹ No return made.² No return made last year.

PURITY OF GAS.

The law provides that when the gas of any company is found on three consecutive inspections to give less light than fifteen standard English candles, or to contain more than twenty grains of sulphur or ten grains of ammonia per hundred cubic feet of gas, or more than ten per cent. of carbonic oxide or any sulphuretted hydrogen, a fine of one hundred dollars shall be paid by such company to the city or town supplied by it. (Pub. Stats., chap. 61, sect. 14.)

The following tables show the amount of impurities found on the given dates, and the whole number of inspections during the year, of the gas of the several companies therein named, as reported to this Board by the State Inspector of Gas.

Kind of Impurities	NAME OF COMPANY.	Amount of Impurity.	DATE WHEN FOUND.	Total Number of Inspections during the year.
Deficient candle-power.	Spencer,	12.5	Dec. 16,	2
Sulphur, grains per 100 cu. ft.	Cambridge,	22.2	Mar. 24,	20
	Lawrence,	20.3	Mar. 17,	14
	Lowell,	23.0	Mar. 17,	30
	Newton	25.2	Oct. 13,	8
Ammonia, grains per 100 cubic feet.	Boston,	10.5	May 4,	53
	"	10.9	June 23,	—
	"	12.0	June 29,	—
	"	12.1	July 12,	—
	East Boston,	13.5	June 14,	8
	Fall River,	16.3	Oct. 27,	9
	Holyoke,	23.0	June 21,	10
	"	11.8	July 6,	—
	Nantucket,	18.2	Aug. 18,	2
	"	14.3	Oct. 25,	—
	Plymouth,	32.3	April 27,	2
	Roxbury,	12.5	Aug. 24,	25
	"	21.1	Dec. 15,	—
	South Boston,	11.1	Oct. 20,	12
	Worcester,	12.7	May 12,	17
	"	43.4	June 22,	—
	"	30.0	July 6,	—
	"	12.9	July 28,	—
Sulphuretted hydrogen.	Beverly,	Trace.	Nov. 18,	3
	"	"	Dec. 24,	—
	Dedham,	"	Dec. 3,	3
	Manufacturers' (Fall River),	"	Nov. 17,	4
	Plymouth,	"	Sept. 30,	2
Carbonic oxide, per cent.	Amesbury,	28.66	Nov. 22,	2
	"	29.60	Dec. 23,	—
	Cottage City,	16.21	Aug. 19,	2
	"	15.15	Oct. 26,	—
	Miller's River (Athol),	28.40	Aug. 13,	2
	"	25.74	Nov. 5,	—
	Roxbury,	11.09	Dec. 24,	25

The inspections cited in the above table were consecutive in Holyoke, Nantucket, Worcester, Beverly, Amesbury, Cottage City and Athol, and also the two of June 23d and 29th at Boston.

A comparison of the inspections made in 1885, 1886 and 1887 shows the following results : —

	1885.	1886.	1887.
Number of inspections made,	517	426	445
Number of companies subject to inspection,	56	58	59
Number of companies showing deficiency in candle-power,	-	1	1
Highest candle-power, not including ten oil-gas companies,	26.0	24.0	23.3
Lowest candle-power, not including ten oil-gas companies,	15.1	14.7	12.5
Average candle-power, not including ten oil-gas companies,	17.62	17.76	17.74
Number of companies showing sulphuretted hydrogen,	3	4	4
Number of companies showing excess of sulphur,	0	2	4
Number of companies showing excess of ammonia,	6	15	9
Number of companies showing excess of carbonic oxide,	3	4	4
Largest amount of sulphur,	19.1	20.2	25.2
Smallest amount of sulphur,	2.8	2.5	1.4
Average amount of sulphur,	9.93	10.42	8.81
Largest amount of ammonia,	36.4	58.7	43.4
Smallest amount of ammonia,	1.-	1.-	1.-
Average amount of ammonia,	3.21	4.05	3.29

The inspections of the ten oil-gas companies showed : —

	1885.	1886.	1887.
Highest candle-power,	61.3	58.6	59.7
Lowest candle-power,	20.0	23.0	22.1
Average candle-power,	30.60	30.35	30.36

VIOLATION OF LAWS.

The Board, at the time of its inspection of the works of the Miller's River Gas Light Company, at Athol in October, saw no evidence that a change had been made in the process of manufacturing gas, as was promised by the treasurer of the company in his letter to the Board, under date of Dec. 29th, 1886. It is

understood that proceedings have been commenced against the company to enforce the penalty for the violation of law mentioned in the last report.

The Worcester Gas Light Company has incurred and paid the fine prescribed for making gas containing an excess of ammonia.

In pursuance of the statute the Board notified the Attorney-General that it appeared, by information received from the State Inspector, that the gas supplied by the Cottage City Gas Company was found to have an excess of carbonic oxide at three consecutive inspections, as follows :—

July 7, 1886,	17.50 per cent.
Nov. 30, 1886,	23.80 per cent.
Aug. 19, 1887,	16.21 per cent.

The Board has recently been informed that the fine has been paid by the company.

PETITION OF GAS CONSUMERS IN WORCESTER.

The following petition was received by the Board, January 4, 1887 :—

COMMONWEALTH OF MASSACHUSETTS.

To the Honorable the Gas Commissioners of the Commonwealth :

The undersigned, being citizens of Worcester in the county of Worcester, and customers of the Worcester Gas Light Company, and twenty at least in number, complain against said company, and allege that for a long time past the said company has sold and delivered to your complainants and others gas of a greatly inferior quality, of insufficient illuminating power, and composed of such materials as to cause great and unnecessary quantities of smoke in burning, and in other respects below the reasonable standard of excellence with which it ought to comply. And your complainants further allege that said company has charged, and continues to charge, a price for its gas so sold and delivered much higher than it is worth, and more than said company ought to charge, having reference to the cost thereof, and much more than it has a right to charge under the provisions of its charter and according to the obligations under which it was allowed to establish its business in said Worcester.

Dated this 31st day of December, 1886.

The hearing on this petition was begun on February 12, and by request of the parties interested was continued upon the 19th and 26th of February, the 5th, 12th and 19th of March. Twenty-six

witnesses were called for the petitioners and ten for the company. All the evidence was heard in Worcester, but the closing arguments were made at the office of the Board in Boston.

The report follows : —

COMMONWEALTH OF MASSACHUSETTS.

OFFICE OF THE BOARD OF GAS COMMISSIONERS,
13 BEACON STREET, BOSTON.

REPORT UPON THE PETITION OF SUNDRY CUSTOMERS OF THE WOR-
CESTER GAS LIGHT COMPANY.

This was a complaint in writing against the Worcester Gas Light Company concerning the quality and price of gas, and was signed by 105 consumers. The hearing was begun on February 12 and finished on the 19th day of March. Both parties were represented by able counsel, and numerous witnesses were examined on behalf of each.

Aside from some suggestions about smokiness, the principal complaint was of the great variation in the quality of the light, and this difficulty was shown to exist in localities widely separated. There was a concurrence of testimony that at times in certain localities the light was quite satisfactory and that at other times it was very greatly diminished. There was also some criticism of the general policy of the company under which this condition of things had arisen. The witnesses were for the most part business men without knowledge of gas making, and confined their evidence to their personal observations with but little attempt to reveal causes or suggest remedies. From the evidence it appeared that these difficulties were not seriously felt until some time in the winter of 1884-85, and had continued since that time, being least noticeable in the months of least consumption.

The company did not attempt to deny that some of these difficulties existed, but claimed that, with the possible exception that in certain streets their mains might have become too small for the increased consumption, the difficulties were due to causes wholly beyond their control and particularly to serious defects in the piping and fixtures on the premises of the consumer.

Besides considering the evidence presented at the public hearing it was found necessary to make a careful examination of the company's entire facilities for manufacture and distribution, to study the method employed in making the gas as shown by its manufacturing records, which appear to have been carefully kept, and to make a rigid scrutiny of its books of account and such of its corporate records as indicated the general policy and history of its corporate affairs.

The Board is convinced that the manufacture of gas is under the charge of an efficient and competent gas engineer of long experience, and there is but little criticism to be made of his methods, excepting such as would probably apply to any works where water-gas is made in

varying quantities and at unequal intervals of time and delivered with coal-gas.

In forty-three inspections made by the State inspector of gas since Jan. 1, 1885, the candle-power has never been found below the legal standard, in only two instances was the legal limit of impurities attained, and during this time the average candle-power would compare favorably with that of other large companies in the State. All these inspections were made at the company's office. Although these facts are to the credit of the company they cannot be considered a sufficient answer to the complaints in this case, since the difficulties are of a character which it is not a part of the inspector's duty to investigate.

It ought not to be overlooked in the determination of a case of this kind that, even where the greatest care is taken in the management, accidents may occur at the works, and the flow of gas in the pipes may be more or less interrupted by temporary and unexpected obstructions, equally annoying to manager and consumer. Chief, perhaps, among these is naphthaline, whose properties are as yet but imperfectly understood by gas engineers. It is possible that some portion of the difficulties experienced at Worcester is due to the occasional formation of this substance in the mains, and although it was suggested that it had occurred with greater frequency during the present winter than formerly, the Board is unable to say, from any evidence in its possession, that this fact is due in any degree to the appliances or materials used, or the methods of manufacture employed, or that the company is in any way responsible for the presence of this and kindred obstructions. But if prevention is impossible, the cure should be complete and promptly applied. A sufficient number of competent men should be ready at all proper times to attend to complaints of this character, and to remedy the difficulties as speedily as the circumstances will permit. To such service consumers are properly entitled, and when efficiently performed it is to the great advantage of both company and consumer. From an inspection of a large book containing memoranda of various matters there is some evidence that these complaints have not always received attention with the promptness their nature seems to demand. This work would probably be aided by keeping a book exclusively for recording complaints, which should show the name of the consumer, the trouble alleged, the time when the complaint was received and attended to, what trouble was found, and how and when it was removed, with any other facts deemed important.

The importance of proper piping and the best fixtures can hardly be overestimated, but it too often happens that these receive no attention, and the unfortunate consumer charges to "poor gas" a condition of things which by reasonable care he might have easily escaped. It is undoubtedly the duty of the company to use all reasonable means to inform the public of the conditions which ought to be observed in such work, and to inspect the same when finished and point out needed changes. More than this it cannot be expected to do; the responsibility must then be with the owner or tenant.

The suggestion that the cause of the difficulties in Worcester was to

be found in the faulty piping upon the premises of many consumers has led to a personal inspection on behalf of the Board of the piping and fixtures in several buildings where complaints were made. In some instances the poor light may have partially resulted from defective piping and was therefore not wholly the fault of the gas company. But an examination of the system of street mains and the records of the company show very clearly that its policy has been narrow and illiberal in the management of its business. Many of the mains are manifestly too small for the amount of gas required to pass through them. Apparently but little effort has been made to extend the mains to secure an increased sale of gas or to increase the size of those already laid, to keep pace with increased consumption. The company and the public have both suffered from this want of enterprise in pushing the business.

The cause of the complaint in regard to the poor quality of the light is believed to be due, principally, to the small size of many of the mains, and the manner in which they have been laid. A prominent instance of this is the northerly portion of Union Street, where, to supply a continuous line of large manufacturing establishments, reliance is placed exclusively on a three-inch main, with no connections to assist the circulation. This should be replaced by at least a six-inch main, with such connections as will best facilitate a flow of gas. On the western side of the city the pipes are carried over a ridge 125 feet above the gas works, and are used to supply levels 60 to 75 feet below on the opposite side. Such methods of delivering gas require a higher pressure than is desirable either to the company or the consumer. Some portion of this excessive pressure may be overcome by so connecting the mains as to improve the circulation.

In the judgment of the Board a line of leading mains of ample size should be constructed, extending in parallel lines on either side of this ridge and around its northerly end. These parallel lines should be connected by mains already built over the ridge and others, which the increased consumption will probably soon render necessary. To do this would call for so large an expenditure of money that its immediate completion is not urged. In the judgment of the Board the demand for this is imperative, and arrangements for its execution ought to be entered upon as soon as practicable. The mains then on both sides of the ridge would be at about the same level, and the gas would be supplied to the higher levels with a very much less pressure than is now required.

As already stated, the size and system of laying the mains is responsible, in a very large degree, for the insufficiency of light. There are, however, two other facts that may have contributed, in some instances, to aggravate the trouble. These are the large amount of nitrogen found in the gas, and the use of water and coal-gas combined.

From the testimony of the State inspector of gas it appears that more than a normal amount of nitrogen has frequently been found in the Worcester gas. On two occasions, when from 15 to 25 per cent. of this element appeared, it was claimed by the company to be due to an

accident. No attempt was made to account for the large amount found on other occasions.

It appeared also from the testimony of the inspector that a quantity of nitrogen, which would have but very little effect on the illuminating power of the gas when burnt in an argand burner, such as is used by the inspector, might reduce the candle-power by nearly 50 per cent. when the gas was consumed in the flat-flame burner commonly used.

Since some time in January, 1885, the gas supplied by the company has been partly coal-gas and partly water-gas, the former made in benches, with regenerative furnaces of an approved pattern, the latter in a double set of the "Granger" apparatus. Both these plants have been needed to supply the demand during the periods of greatest consumption.

Opinions of gas engineers differ widely as to the feasibility of manufacturing and distributing these two gases together, and the Board does not feel called upon to pronounce upon the general proposition, but only to consider whether the particular methods employed at Worcester have contributed in any degree to the difficulties existing there. It is to be noted that while the operation of the coal-gas works was regular and constant, that of the water-gas works was irregular and intermittent, governed, apparently, by the season or the weather. Periods of several days occur in which the proportion of water-gas to coal-gas is maintained nearly constant, followed by longer or shorter periods with a much smaller proportion of water-gas. Intervals occur in the same month of from two to five days each in which no water-gas was made. A consideration of these facts makes it probable that from time to time gas varying in density and in illuminating power would be sent out and used by consumers. Although the effects of such a method would probably be visible at the burner in some localities, it was also probable that, under all the circumstances, no other method was practicable.

Not only is there a considerable variation in consumption from day to day, so that while one day it may be far above the average and the next far below, but for many days the average consumption has exceeded by many thousands the utmost capacity of the holders.

Since this hearing was begun the company has undertaken to relieve itself of embarrassment in this direction, and has now in process of erection an additional holder of a capacity sufficient to more than double their present holder room. Included in this plan of improvement is provision for the erection of approved appliances for maintaining a steady and uniform pressure.

At the suggestion of the Board the State inspector on Friday, March 4, between 5 and 10.30 P. M., made certain tests of the gas in four localities with the following results:—

	Elevation above sea level.	Pressure.	Specific Gravity.
No. 1,	472	2.3	.532
No. 2,	479	1.9	.502
No. 3,	563	3.1	.496
No. 4,	606	3.2	.465

The candle-power at No. 2 was 18.2 and at No. 3 18.3. Samples of gas were taken at three points and eudiometric analyses made of each as follows:—

	No. 1.	No. 2.	No. 4.
Illuminants,	6.65	5.55	4.76
Marsh gas,	38.53	40.65	41.08
Hydrogen,	37.11	38.20	41.30
Carbonic oxide,	10.49	8.73	6.83
Nitrogen,	6.38	6.10	5.25
Oxygen, . . . . .	.14	.10	.11
Carbonic acid, . . . . .	.70	.67	.67
	<hr/> 100.00	<hr/> 100.00	<hr/> 100.00

The complaint about smokiness is so vague and so little explained that the cause and its remedy are not easy to define. The same elements which give the gas a high candle-power may produce smoking if consumed under unfavorable conditions of fixtures or burners, or with insufficient pressure, whether due to small mains, defective piping or other cause.

The petitioners made but little attempt to show by testimony that the price of gas is too high. It was urged by the counsel for the petitioners that there is a binding obligation between the gas company and the citizens of Worcester which requires that gas shall be furnished at as low a price as it is sold in the cities of Boston, New York or Baltimore. This contract seems never to have been enforced, although it is as old as the company, and the Board is not fully convinced that this is the proper tribunal to compel the gas company to fulfill this contract or to determine its validity.

Notwithstanding the want of evidence, the Board believes that the complaint of the petitioners in regard to price should be carefully considered, and is of the opinion that the company should be required to sell gas at a less price than it is now charging to consumers.

A reduction in price should be made, because the capital of the company is excessive for the output of gas and the value of its plant. It should be stated, however, that every dollar of stock has been paid in cash. The company has not improved its field for business to the extent it might have done.

It appears the ambition of the directors has been to pay a yearly dividend of ten per cent. on the capital stock, and this they have succeeded in doing nearly the entire period of thirty-five years that the company has been in existence, notwithstanding the fact that the company has had more than the average number of accidents and misfortunes incident to the business.

Worcester ought to consume two or three times the amount of gas that is now sold, and under a different policy would undoubtedly do so, and this increased consumption would easily insure lower prices. The company has a valuable franchise and is under obligations to make every reasonable effort to supply the citizens with all the gas required, and at a price consistent with a fair interest on the investment.

The company may be held responsible, in some degree, for what it has failed to do in extending its business. Worcester is the second city

in size, wealth and importance in the State, and yet there are twelve towns and cities where the price of gas is less.

It has been the experience of most companies that a decrease in price of gas reduces the income but little, and that only temporarily. The increased consumption soon renders the profits larger than before the reduction.

We believe that a reduction in price is not only of advantage to the consumer, but also to the company. The Board recommends that on and after July 1, 1887, the net price charged by the Worcester Gas Light Company be not more than one dollar and fifty cents per thousand feet.

A change was made in the chairmanship of this Board subsequent to the hearing but before the conclusions were fully reached on this petition. The former chairman has, however, read the report and concurs in the recommendations. The present chairman not having heard any of the evidence or arguments has deemed it improper to take any action in the case.

For the Board,

EDWARD T. ROWELL.

FORREST E. BARKER.

May 14, 1887.

This report was delivered to the company on the sixteenth day of May, and on the following day was considered at a full meeting of the board of directors, when it was voted "that on and after July 1, 1887, the price of gas shall be \$1.80 per thousand feet, with a discount of 30 cents per thousand feet on all bills paid on or before the 15th day of the month in which they are presented." Prior to this the officers of the company had appreciated the necessities of the situation and had inaugurated an extensive scheme of improvements which they have pursued with steadiness and vigor under peculiar and serious embarrassments. Before the plans for these were fully matured the superintendent was attacked by a serious and painful illness which rendered it impossible for him to give to the details of the work that constant attention which was his custom. The company had not employed an assistant superintendent and had no man who could be spared from other duties or was thought able to undertake this work, nor was it able to find one until midsummer, when a competent man, in the employ of the Boston company, was secured and the office of assistant superintendent was created.

A new double-lift covered holder has been erected at the works, upon land purchased during the year, with a capacity of 400,000

cubic feet, increasing the storage facilities fully 100 per cent. The contractors were unable to complete this holder until after the days of largest consumption had passed, and for a time some of the embarassments and disadvantages of a year ago were manifest. The small holder at Lincoln Square has been rebuilt of heavier material and may now be relied upon to work to its full capacity.

More than 16,000 feet of new mains have been laid and none less than three inches in diameter. Much of this has been used to replace smaller mains to improve the circulation by connecting the "dead ends" and in some cases to parallel old pipes with new and larger ones. In taking up old street mains and relaying larger pipe nearly all the services have been relaid and usually with larger pipe, especially in those streets where manufacturing establishments or large buildings are situated and where complaints had been most frequent.

An automatic governor of approved modern construction is to be placed upon the large main leading from the works, by which ample and uniform pressure may be maintained. New purifier covers have been purchased and a "Standard" scrubber with a capacity for 750,000 feet per day has been delivered at the works and is soon to be set up.

About eighty thousand dollars have already been expended in these improvements and plans are making for extensive alterations and additions the coming season, particularly in the way of main laying.

The Board recognizes and appreciates the readiness with which the company has adopted its suggestions, and this promptness has called out a general and merited expression of satisfaction on the part of the public. The greatly improved relations which now exist between the company and its customers must prove of decided advantage to both parties.

ELECTRIC LIGHT.

By chapter 382 of the Acts of 1887, which may be found in the Appendix, the Board was given supervision of companies engaged in the manufacture and sale of electric light.

It was obvious that the duties imposed by the statute were important, as well to the public as the companies. Recently great interest has been shown in the subject of utilizing electricity for lighting. It has attracted large amounts of capital and the talent of the most celebrated inventors of the age. Many things have already been accomplished which but a short time ago were deemed impossible even by the best electricians. The members of the Commission have endeavored to inform themselves upon the subject as rapidly as possible, recognizing that the public interest required that no steps should be taken on their part which would tend to thwart further progress, while the electric light companies could rightly demand a proper consideration for their efforts and enterprises. The public in many places evidently desire electric light as well as gas light, and the capital invested in either method of lighting is entitled to equal protection by the action and policy of the Board, to the extent that will aid in securing permanently the best and cheapest light.

At once was begun the work of obtaining the names of the electric light companies and their respective places of business. As several of them were organized outside the State this was not easily done, but by addressing circulars of inquiry to the town clerks and through other sources it is believed that the names of those actively engaged in business and those organized during the year have been ascertained, and that the list herein given is quite complete. Several of the companies have been visited. The officers and agents of the companies have cordially aided the Board in its investigations, cheerfully exhibiting their books, showing their methods of business, explaining the system and apparatus in use by them and its operation.

It may be said here that electric lights may be divided into two great classes, arc and incandescent. In the arc light a current of electricity is caused to jump across a space between two carbon

points, while in the incandescent lamp a carbon thread is heated by the passage of an electric current to bright redness or whiteness.

The arc lamp consists of two carbon rods enclosed in a glass globe open to the air, between whose points a current of electricity passes; this current transfers small particles from one rod to the other, and raises them during the passage to a very high heat, causing them to give off an intense light. This transference of carbon particles shortens the upper rod and lengthens the lower one, but as some of the carbon is burnt in the air during the passage the lower rod does not grow as rapidly as the upper wastes, so by an ingenious arrangement of magnets the current passing through the lamp causes the upper rod to be fed down at such a rate as to maintain the carbon points at a constant distance apart.

The carbon thread of an incandescent lamp is enclosed in a glass globe from which the air has been exhausted, and is connected with the current coming from the outside wires by means of two bits of platinum wire fused into the glass and attached one to either end of the carbon thread within the globe. The removal of the air prevents the burning of the carbon thread when heated by the passage of the current of electricity.

The arc lights, which give an intense bluish white light, are principally used for street lighting and for large and open rooms, whilst the incandescent lamps, yielding a light of about the same character as gas, are used principally for interior lighting.

Blank balance sheets were sent to each of the companies immediately after the passage of the act, with the request that they be filled out so as to show the financial condition of the company as it appeared on the books at the close of business June 30, 1887. These sheets have all been returned, made up in the main in a manner creditable to the companies and satisfactory to the Board.

Under the statute it also became the duty of the Board to prescribe a form of book-keeping for the companies. In doing this it was the wish of the Board to adopt a method which should be as full and complete as practicable, at the same time following substantially the best systems already in use, and imposing the least amount of extra labor. In this respect the Board desires to

acknowledge the valuable assistance it has received from various companies which it visited, whose officers courteously explained the manner in which the books and accounts of the financial part of the business were kept; also the daily and monthly records of the work done.

The rules and regulations prescribed for keeping the books and accounts will be found in the Appendix.

In December a circular for the purpose of obtaining information of a general character was sent to the different companies, containing questions relating to the size of the plant and the kind and quantity of lights and the amount of power supplied. The facts gathered from the answers to this circular have been tabulated and will, it is believed, be of very great interest.

Eight of the companies were incorporated under the laws of Maine and one under the laws of New Hampshire. It is to be regretted that all are not domestic corporations. The position of a foreign company doing a purely local business and receiving a location for its lines from our town or city officials, with the same formality as if it were chartered here, is to say the least anomalous. Any temporary advantage such as the escape of taxation for a time is more than offset by the doubts and uncertainties as to the legal rights and status of the company. There would seem to be no justification in going to another State for a charter to do business of such a nature within the Commonwealth. If our laws bear too heavily upon this class of corporations let the injustice be pointed out and remedied. The organization of foreign companies for this kind of work should not be encouraged.

The following table gives the name, the year of incorporation, the State in which chartered, the localities supplied, and the capital of the various electric light companies doing business in this State:—

NAME OF COMPANY.	When organized.	State in which chartered.	LOCALITIES SUPPLIED.	Capital.
The Beverly Electric Light Co.,	1887	Not chartered, association,	Beverly,	—
Boston Electric Light Co.,	1886	Maine,	Boston (Chelsea, Cambridge,	\$800,000
Brookline Gas Light Co.,	1887 ¹	Massachusetts,	Boston (Brighton district), Brookline,	—
Cambridge Electric Light Co.,	1886	Massachusetts,	Cambridge,	60,000
Charlestown Gas Co.,	1886 ²	Massachusetts,	Boston (Charlestown),	—
Chicopee Electric Light Co.,	1887	Massachusetts,	Chicopee,	10,000
Clinton Gas Light Co.,	1887 ¹	Massachusetts,	Clinton,	—
Cottage City Gas Co.,	1885 ²	Massachusetts,	Cottage City,	—
Edison Electric Illuminating Co. of Boston,	1885	Massachusetts,	Boston,	500,000
Edison Electric Illuminating Co. of Brockton,	1883	Massachusetts,	Brockton,	71,000
Edison Electric Illuminating Co. of Fall River,	1883	Massachusetts,	Fall River,	81,000
Edison Electric Illuminating Co. of Lawrence,	1882	Massachusetts,	Lawrence,	65,000
Edison Electric Illuminating Co. of New Bedford,	1884	Massachusetts,	New Bedford,	100,000
Electric Light and Patent Flooring Co.,	1886	Massachusetts,	Amesbury,	22,000
Essex Electric Light and Power Co.,	1884	Maine,	Haverhill, Groveland,	—
Fall River Electric Light Co.,	1883	Massachusetts,	Fall River,	10,000
Framingham Electric Light Co.,	1887	Not chartered, owned by an individual,	Framingham,	—
Franklin Electric Light Co.,	1887	Not chartered, owned by a firm,	Franklin,	—
Franklin Electric Light Co.,	1886	Massachusetts,	Turner's Falls,	1,000

¹ Date of permission to engage in the business granted by Board.² Date of permission to engage in the business given by Legislature.³ Not returned.

NAME OF COMPANY.	When organized.	State in which chartered.	LOCALITIES SUPPLIED.	Capital.
Gloucester Electric Light Co.,	1884	Massachusetts, . .	Gloucester,	\$12,500
Greenfield Electric Light and Power Co.,	1886	Massachusetts, . .	Greenfield, Deerfield,	10,000
Holyoke Electric Light and Power Co.,	1884	Massachusetts, . .	Holyoke, South Hadley,	30,000
The Hudson Electric Light Co.,	1886	Maine,	Hudson,	15,000
Lawrence Gas Co.,	1887 ¹	Massachusetts, . .	Lawrence,	—
Lynn Electric Lighting Co.,	1882	Massachusetts, . .	Lynn, Swampscott,	50,000
Leicester Electric Co.,	1887	Massachusetts, . .	Leicester,	4,000
Malden Electric Light Co.,	1885	Maine,	Malden, Melrose, Medford,	30,000
The Marlborough Schuyler Electric Light Co.,	1886	Massachusetts, . .	Marlborough,	30,000
Middlesex Electric Light Co.,	1883	Maine,	Lowell,	130,620
Millford Electric Light and Power Co.,	1886	Massachusetts, . .	Millford, Hopedale,	30,000
Millbury Electric Co.,	1887	Massachusetts, . .	Millbury,	30,000
Natick Electric Co.,	1886	Maine,	Natick,	10,000
New Bedford Electric Light Co.,	1883	Massachusetts, . .	New Bedford,	30,000 ²
Newburyport Electric Light and Power Co.,	1887	Massachusetts, . .	Newburyport,	75,000
Newton Electric Light and Power Co.,	1886	Massachusetts, . .	Newton, Watertown,	15,000
North Adams Electric Light and Power Co.,	1885	Massachusetts, . .	Newton, Adams,	25,000
Northampton Electric Lighting Co.,	1886	Massachusetts, . .	North Adams,	7,500
North Attleborough Steam and Electric Co.,	1886	Massachusetts, . .	Northampton,	40,000
Palmer Electric Co.,	1887	Massachusetts, . .	North Attleborough, Attleborough,	30,000
Pittsfield Illuminating Co.,	1887	Massachusetts, . .	ough,	30,000
Pittsfield Electric Light Co.,	1885	Massachusetts, . .	Under construction; will supply Palmer and Monson,	30,000
Plymouth Electric Light Co.,	1886	Massachusetts, . .	Pittsfield,	25,000
		New Hampshire, . .	Pittsfield,	5,000
			Plymouth,	3

Salem Electric Lighting Co., . . .	1882	Massachusetts, . . .	Salem, . . .	70,000
The Somerville Electric Light Co., . . .	1887	Massachusetts, . . .	Somerville, . . .	20,000
Southbridge Electric Co., . . .	1887	Massachusetts, . . .	Southbridge, . . .	15,000
Spencer Gas Co., . . .	1886	Massachusetts, . . .	Spencer, . . .	—
Taunton Electric Lighting Co., . . .	1882	Massachusetts, . . .	Taunton, . . .	20,000
United Electric Light Co., . . .	1887	Massachusetts, . . .	Springfield, . . .	100,000
Wachusett Electric Light Co., . . .	1883	Maine, . . .	Fitchburg, . . .	100,000 ⁴
Waltham Gas Light Co., . . .	1886 ⁵	Massachusetts, . . .	Waltham, . . .	—
Ware Electric Light Co., . . .	1887	Massachusetts, . . .	Plant in process of erection, . . .	15,000
Webster, . . .	1887	Massachusetts, . . .	—	10,000
Westborough Electric Light and Power Co., . . .	1886	Maine, . . .	Westborough, . . .	³
Westfield Gas Light Co., . . .	1887 ¹	Massachusetts, . . .	Westfield, . . .	—
Woburn Electric Light and Power Co., . . .	1887	Massachusetts, . . .	Woburn, . . .	18,000
Worcester Electric Light Co., . . .	1883	Massachusetts, . . .	Worcester, . . .	100,000

¹ Date of permission to engage in the business granted by Board.

² June 30, 1887, amount paid in \$14,200.

³ Not returned.

⁴ June 30, 1887, amount paid in \$81,000.

⁵ Date of unanimous consent of stockholders allowing company to engage in the business.

The following electric light companies, not included in the above list, were incorporated during the year:—

Somerville Electric Light, Heat and Power Co.,	Feb. 1,	\$25,000
Westfield Electric Light Co.,	Feb. 9,	25,000
Orange Electric Light Co.,	Oct. 7,	10,000
Adams Electric Light and Power Co.,	Dec. 10,	5,000

Of these companies the ones at Adams and Orange are under construction, the one at Somerville has never done anything, and that at Westfield has been absorbed by the gas company.

The following table gives some of the statistics of arc lighting, and the next following gives corresponding figures for incandescent lighting, as done from central stations in this State. This information is of Dec. 15, 1887.

Arc Lighting.

NAME OF COMPANY.	SYSTEM USED.	Maximum Dyna- mo Ca- pacity.	Num- ber Public Lights.	Nominal Candle- Power.	Number of Hours burnt per Night.	Number of Nights per Month.	Price per Night.	Num- ber of Com- mercial Lights.	Nomi- nal Candle- Power.	Num- ber of Cus- tomers.
Beverly,	Thomson-Houston,	35	15	2,000	Sunset to midnight,	Every night,	\$0.60	- 2	- 2	- 2
Boston,	Brush, Thomson-Hous- ton, American.	2,367	550	2,000	8 to 15,	Every night,	0.65	1,385	2,000	317
Brookline,	Thomson-Houston, Amer- ican, Weston,	{ 260	96	61 at 1,200 35 at 2,000	Average 10½,	Every night,	0.50	36	2,000	22
Cambridge,	New England, Weston,	210	77	2,000	Average 10.85,	Every night,	0.55	40	2,000	27
Charlestown,	Brush,	120	51	2,000	8 to 15,	Every night,	0.65	20	2,000	16
Chicopee,	Thomson-Houston,	50	32	1,200	Until 1 A.M.,	25,	Abt. 0.26½	-	-	-
Clinton,	Schuyler,	90	30	1,200	Six to seven,	Av. nearly 30,	Abt. 0.28	30	1,200	16
Cottage City, ¹	Ball,	60	7	1,000	Six,	30,	0.62½	35	1,000	2
Edison (Brookton),	Thomson-Houston, Amer- ican,	110	25	2,000	Sunset to 1 A.M.,	Every night,	0.45	61	2,000	38
Edison (Lawrence),	American,	50	-	-	-	-	-	45	2,000	23
Elec. Light & Pat. Floor- ing Co. (Amesbury),	Thomson-Houston,	80	49	1,200	To 12 o'clock,	All dark nights,	3	16	1,200	7
Essex (Haverhill),	Thomson-Houston,	150	34	2,000	Dusk to dawn,	Moon schedule,	0.47	60	1,200	Abt. 40
Fall River,	Thomson-Houston,	225	27	2,000	All night,	Every night,	Abt. 0.56½	146	1,200	27
Franklin,	Thomson-Houston,	75	37	1,200	Dark till 12.30 A.M.,	Every night,	0.33½	3	1,200	8
Franklin (Turner's Falls),	Thomson-Houston,	60	25	1,200	Until midnight,	18 minimum,	0.32	9	1,200	7
Franklin (Turner's Falls),	Thomson-Houston,	30	18	2,000	Until 1 A.M.,	26,	Abt. 0.33	9	2,000	7
Gloucester,	Thomson-Houston,	88	15	1,200	Twilight to 12 o'clock,	Every night,	Abt. 0.26½	21	1,200	8
Greenfield,	Thomson-Houston,	45	20	1,200	Dark until 11,	Except when good moon.	4	15	1,200	6
Holyoke,	Schuyler,	375	92	2,000	21 all night, rest till mid- night,	20 to 21,	All night, 0.50 Others, 0.37½	223	2,000	70
Hudson,	Thomson-Houston,	45	10	1,200	To 11.30 P.M.,	Every night,	Abt. 0.25	9	1,200	8
Lawrence,	Thomson-Houston,	150	17	2,000	Till 12 o'clock,	Every night,	0.33½	94	2,000	33
Lynn,	Thomson-Houston, ¹	270	115	2,000	Sunset to 1 A.M.,	Every night,	0.47½	132	2,000	65

¹ Run during summer months only.² Not returned.³ \$5½ per year, equal to about 25 cents per night.⁴ Yearly contract.

Are Lighting—Concluded.

NAME OF COMPANY.	SYSTEM USED.	Maximum Dyna- mo Ca- pacity.	Num- ber Public Lights.	Nominal Candle- Power.	Number of Hours burnt per Night.	Number of Nights per month.	Price per Night.	Num- ber of Com- mercial Lights.	Nomi- nal Candle- Power.	Num- ber of Cus- tomers.
Malden,	Thomson-Houston, . .	80	44	1,200	Dark until midnight, .	Every night, .	Abt. \$0.27½	33	1,200	18
Marlborough,	Schuyler,	70	22	2,000	Sunset to midnight, .	Every night, .	Abt. 0.27½	26	1,200	19
Middlesex (Lowell), .	Thomson-Houston, . .	350	104	2,000	Dark to daylight, . .	Every night, .	Abt. 0.55	240	2,000	72
Milford,	Thomson-Houston, . .	95	15	1,200	Sunset to midnight, . .	Every night, .	Abt. 0.33½	60	1,200	17
Milbury,	Thomson-Houston, . .	50	15	1,200	Until midnight, . . .	Every night, .	0.22	18	1,200	7
Natick,	Thomson-Houston, . .	83	27	1,200	Until 12.30 A.M., . .	Every night, .	Abt. 0.33½	20	1,200	16
New Bedford,	Thomson-Houston, . .	186	50	2,000	Sunset to half hour be- fore sunrise,	26 to 31, . . .	0.50	86	2,000	33
Newburyport,	Thomson-Houston, . .	80	31	1,200	Sunset to midnight, . .	20,	0.33½	28	1,200	13
Newton,	Thomson-Houston, . .	90	76	1,200	Sunset to sunrise, . .	20,	0.50	—	—	—
North Adams,	Thomson-Houston, . .	83	—	—	—	—	—	53	1,200	22
Northampton,	Thomson-Houston, . .	140	83	1,200	Till midnight,	25,	Abt. 0.25	30	1,200	15
North Attleborough, .	Thomson-Houston, Schuy- ler,	230	122	1,200	Dark till 12.30 A.M., .	When there is no moon,	0.25	90¹	1,200	70
Pittsfield E. L. Co., .	Thomson-Houston, . .	95	32	1,200	From dark till 12.30 A.M.,	25,	Abt. 0.30	33	1,200	12
Plymouth,	Ball,	35	14	1,600	Eight,	25,	Abt. 0.40	24	1,600	16
Salem,	Thomson-Houston, . .	270	132	2,000	Dusk to daylight, . .	Every night, . .	0.47	Abt. 120	2,000	Abt. 35
Somerville,	American,	100	54	2,000	Until 1 A.M.,	Every night, . .	0.45	20	2,000	16
Southbridge,	Thomson-Houston, . .	160	43	1,200	Av. in Nov. 7 hours, . .	23,	0.37	38	1,200	19
Spencer,	Ball,	70	60	1,200	Till 11 P.M.,	20,	0.27	1	1,200	1
Taunton,	Arnoux,	65	26	2,000	Eight,	20 to 22, . . .	0.33½	40	2,000	10
United (Springfield), .	Thomson-Houston, . .	233	50	2,000	All night,	Every night, . .	0.60	130	1,200	Abt. 53
Wachusett (Fitchburg),	Thomson-Houston, . .	130	50	2,000	From dark till midnight,	All except moon- light nights, . .	0.25	70	2,000	25
Waltham,	Thomson-Houston, . .	100	31	1,200	Sunset to 1 A.M., . .	Every night, . .	0.35	18	1,200	6
Westborough,	Thomson-Houston, . .	30	6	1,200	Dark to 11.30 P.M., .	Every night, . .	Abt. 0.27	18	1,200	18
Westfield,	Schuyler,	110	30	2,000	Until 1 A.M., ², . . .	Every night, . .	0.22	34	1,200	20
Woburn,	Brush,	45	40	1,200	—	—	²	—	—	—
Worcester,	Thomson-Houston, . .	395	138	2,000	From dark to daylight, .	Every night, . .	0.55	235	2,000	65

¹ Includes the incandescent lights in use, as reduced to an equivalent in arcs.

² Not returned.

Incandescent Lighting.

NAME OF COMPANY.	SYSTEM USED.	Maximum dynamo ca- pacity, in c. p. lamps.	Number of Public Lights.	Nominal Candle- Power.	Number of Hours Burnt per Night.	Number of Nights per Month.	Price per Night.	Number of Commer- cial Lights.	Nominal Candle- Power.	Number of Customers
Beverly,	Thomson-Houston,	165	—	—	—	—	—	10	65 and 32	3
Boston,	Brush, Swan, Weston, Thomson-Houston & Sun,	4,200 300	344 2	16-32-65 and 125 65	—	—	—	1,500 113	10-32-65 and 125 16 to 25	118 8
Brookline, Cambridge,	Weston, (Multiple Se- ries),	2,500	12	16	—	—	—	1,050	16	—
Charlestown,	Brush (from arc cir- cuit),	—	—	—	—	—	—	72	20	8
Edison (Boston),	Edison,	12,000	—	—	—	—	—	8,500	From 4 to 100	200
Edison (Brooklyn),	Edison,	2,000	—	—	—	—	—	2 3,000	10	201
	Edison Municipal,	800	406	15-20-30	From sundown to 1 A. M., .	Every night, .	{ \$15 per 18 per 22 year. }	—	—	—
Edison (Fall River),	Edison,	3,050	—	—	—	—	—	2 4,300	{ 10, 10-50, 24-32 50 and 100 }	228
Edison (Lawrence),	Edison,	5,400	{ 432 116 7 }	10 16 32	Until 11:30 P. M., All night, . .	Every night, .	\$1.00 per mo. 2.70 per mo.	2 4,250 3 3,885	From 1 to 100 c. p.	225 280
Edison (New Bedford),	Edison,	3,400	—	—	—	—	—	—	—	—
Elec. Lc. & Pal. Flooring Co. (Amesbury),	Thomson-Houston (from arc circuit),	—	—	—	—	—	—	35	30	12
Essex (Haverhill),	Thomson-Houston, are circuit,	1,000	—	—	—	—	—	600	20	150
Framingham,	Thomson-Houston,	75	—	—	—	—	—	80	16	15
Franklin,	Thomson-Houston (from arc circuit),	—	—	—	—	—	—	—	—	—
Gloucester,	Thomson-Houston (from arc circuit),	—	—	—	—	—	—	37	65 and 32	14
Greenfield,	Sawyer-Man,	800	—	32	—	—	—	80	65	25
Hudson,	Thomson-Houston (are and incandescent),	200	4 series.	—	—	—	—	700	64-32-20	64
Lexen,	Thomson-Houston,	400	8 series.	65	—	—	—	100	16	18
Malden,	Thomson-Houston,	200	—	—	—	—	—	384	16-32-65	28
		200	—	—	—	—	—	100	21	19

1 All were run on incandescent lamps.

2 Ten candle-power.

3 Equal to 6,273 lamp of ten candle-power.

Incandescent Lighting — Concluded.

NAME OF COMPANY.	SYSTEM USED.	Maximum capacity, 16 c.p. lamps.	Number of Public Lights.	Nominal Candle-Power.	Number of Hours Burnt per Night.	Number of Nights per Month.	Price per Night.	Number of Commercial Lights.	Nominal Candle-Power.	Number of Customers.
Marlborough, . . .	Schuyler (series from are circuit), . .	240	-	-	-	-	-	144	16	17
Middlesex (Lowell), .	Thomson-Houston, .	600	-	-	-	-	-	160	16	20
Milford, . . .	Brush-Swan, . . .	600	-	-	-	-	-	353	16	55
Millbury, . . .	Thomson-Houston (from are circuit), . .	-	-	-	-	-	-	112	16-32-65	20
Natick, . . .	Thomson-Houston, .	400	-	-	-	-	-	386	20	35
New Bedford, . . .	Thomson-Houston (from are circuit), . .	-	-	-	-	-	-	37	16	6
Newburyport, . . .	Thomson-Houston, .	400	-	-	-	-	-	303	20-32-65	52
Newton, . . .	Thomson-Houston, .	900	43	25	-	-	-	350	20	24
North Adams, . . .	Thomson-Houston (from are circuit), . .	-	-	-	-	-	-	1	20-32-65	7
Northampton, . . .	Sawyer-Mann, . . .	400	-	-	-	-	-	300	20	45
North Attleborough, .	Thomson-Houston (from are circuit), . .	-	-	-	-	-	-	-	-	-
Pittsfield Ill. Co., . .	Westinghouse, . . .	1,600	-	-	-	-	-	1,000	16	123
Pittsfield E. L. Co., .	Thomson-Houston (from are circuit), . .	-	-	-	-	-	-	15	20-65	4
Plymouth, . . .	Ball, . . .	-	-	-	-	-	-	42	16	4
Salem, . . .	Sawyer-Mann, . . .	250	-	-	-	-	-	150	16 to 65	Abt. 18
Somerville, . . .	American (from are circuit), . .	-	-	-	-	-	-	12	25 to 125	7
Southbridge, . . .	Thomson-Houston, .	300	-	-	-	-	-	31	16 to 65	17
Taunton, . . .	Brush-Swan, . . .	1,950	-	-	-	-	-	300	16	45
United (Springfield), .	Westinghouse, . . .	-	-	-	-	-	-	2	10 to 150	60
Wachusett (Fitchburg),	Mather & Thompson-Houston alternathk., .	500	-	-	-	-	-	150	16	23
Waltham, . . .	Thomson-Houston, .	400	32	10 and 65	Sunset to 1 A. M.,	Every night,	-	144	20-32-65	50
Westborough, . . .	Thomson-Houston, .	300	-	-	-	-	-	118	16 and 20	16
Westfield, . . .	Schuyler (from are circuit), . .	-	-	-	-	-	-	40	75 to 10	17
Woburn, . . .	Edison, Sun, . . .	720	-	-	-	-	-	782	13	69
Worcester, . . .	Thomson-Houston, .	800	-	-	-	-	-	348	20	22

¹ Equal to 10 arc lights of 1,200 candle-power.² Not given.

The following table shows the lighting companies supplying power, the kind of motors used, the number of motors in use and the aggregate horse-power supplied : —

NAME OF COMPANY.	Kind of Motors used.	Number of Motors in use.	Aggregate Horse-power supplied.
Boston,	Weston, Baxter, "C. & C." and Brush,	31	48
Brookline,	Sprague,	1	5
Edison (Boston),	Sprague,	80	250
Edison (Brockton), . . .	Sprague and "C. & C.," . .	5	7
Edison (Fall River), . .	Sprague and "C. & C.," . .	14	20
Edison (Lawrence), . . .	Sprague,	18	36 $\frac{1}{4}$
Edison (New Bedford), .	Sprague,	16	23
Middlesex (Lowell), . .	Thomson-Houston,	6	18
Milford,	Sprague,	2	12
Newburyport,	Thomson-Houston,	2	3
Northampton,	Sprague,	1	$\frac{1}{2}$
United (Springfield), . .	Sprague and Thomson-Houston,	1	1

¹ Not returned.

ISOLATED PLANTS.

The growth of isolated electric light plants in this State is very rapid. It is difficult to get complete information in regard to the number and capacity, but the following facts obtained from reliable sources give a pretty clear idea of the extent of this branch of the electric lighting business : —

There are more than 250 of these plants in the State. Of this number about 190 furnish incandescent lights and have a total capacity of over 58,000 lights. There are 62 plants furnishing arc lights, with a total capacity of 2,350 lights.

These plants are used largely in mills, manufactories and commercial houses where there is power used for other purposes.

AUTHORIZATION OF GAS COMPANIES TO FURNISH ELECTRIC LIGHT.

This Board by an act of the last Legislature, chapter 385, printed in the Appendix, is given the power to authorize gas companies to engage in electric lighting.

Prior to the passage of the act four gas companies also furnished electric light, namely, the Charlestown Gas Company, the Cottage City Gas Company, the Spencer Gas Company and the Waltham Gas Light Company. Three other companies, the Dedham and Hyde Park Gas Light Company, Marblehead Gas Light Company and Woburn Gas Light Company, were by special acts in 1886 allowed to do the same, but neither of these has as yet exercised the right.

During the year the Board gave permission to the gas companies to do electric lighting in Clinton, Westfield, Brookline and Lawrence.

This table shows the date of the order giving authority, the time allowed for procuring a plant and the minimum capacity of the same : —

NAME OF COMPANY.	Date of Order.	Time allowed.	Minimum Capacity.
Clinton, .	Aug. 19	6 mos.	90 arc lights of nominally 1,200 candle-power each.
Westfield,	Sept. 23	6 mos.	100 arc lights of nominally 2,000 candle-power each.
Brookline,	Oct. 10	6 mos.	180 arc lights of nominally 1,200 candle-power each, 100 arc lights of nominally 2,000 candle-power each, and 300 incandescent lights of nominally 16 candle-power each.
Lawrence,	Nov. 12	6 mos.	90 arc lights of nominally 2,000 candle-power each.

In each case the Board gave a hearing, fourteen days' notice of which had been first served upon the gas company, the electric light companies, the city or town in which they were located, and by newspaper publication.

The Commissioners have construed the act as conferring on them the power and duty of deciding, by the exercise of a broad discretion, whether the request of a company should be allowed or refused.

The parties in interest are the consumers and the owners of the capital invested in the gas and electric light business. The convenience, comfort and pecuniary benefit to the community are surely of the first importance. Capital on the other hand, pru-

dently devoted to these objects, is entitled to a fair compensation. The Board has endeavored to exercise due and impartial regard for the stockholders in either class of companies, keeping constantly in mind that the public good demands that the light, whether from gas or electricity, be manufactured in the most economical way, and sold at the lowest remunerative prices. As a rule, in the towns and smaller cities there is an apparent advantage in having both kinds of light supplied by one company; and evidently this view was taken by the Legislature in granting the gas companies in several such places, by special acts, authority to engage in electric lighting. For this reason the Board has looked with favor upon the union of the gas company and any existing electric light companies in such municipalities.

In this connection the capitalization, or amount of capital employed in the enterprise, is an important element. It should be kept as low as possible. Needless outlay, by reason of competition, should be avoided and saved, for when it has been once incurred, and money paid and expended in enterprises not required to supply the public wants, so great is the expectation of gain, and so persistent and unyielding the demands of capital for dividends, the remedy is not then easily found or applied, and the evil should be prevented at the outset by keeping the capitalization on the proper basis.

In each instance where authority has been granted by the Board the petitioning gas company had bargained for an electric plant, already in operation in the locality, provided its petition should be allowed.

In Clinton the electric light plant was owned by three individuals who were officers and stockholders in the gas company. In the Westfield case the gas company had bought the electric plant provisionally and desired to move it to the gas works, and the counsel representing both companies also appeared for the town in behalf of the application. At Brookline the electric plant was already built upon the land of the gas company, and was owned wholly or chiefly by holders of stock in the latter company.

Only in the Lawrence case was there any positive remonstrance. The Edison Electric Illuminating Company of Lawrence appeared by its president and treasurer in opposition to the petition of the

Lawrence Gas Company, which was represented by its agent. The city solicitor of Lawrence was present in behalf of the city at the hearing, but took no active part, for the reason expressed by him that it did not appear that the city was specially interested in the matter.

Before presenting its petition the gas company, by the requisite vote of two-thirds of its stockholders, had decided to engage in electric lighting if it could obtain the authority, and had purchased, conditionally, the franchise and plant of the Lawrence Electric Light Company, there being two electric light companies in that city, and a majority of the stock of this electric light company had been secured by persons largely interested in the gas company. The two electric light companies were formed and began business in Lawrence in 1882. It was shown at the hearing that it had become necessary to move the plant of the Lawrence Electric Light Company to another location, and to substitute steam for water power, which had not, for certain reasons, proved satisfactory, and that the gas company had ample room at its works for the electric plant.

It was claimed by the petitioners and conceded by the remonstrants that, in this instance, the gas company could supply electric light more cheaply than could be done by either of the electric light companies; and this was strongly pressed by the agent of the gas company as a reason for granting the petition, and was urged by the Edison company on the other hand as good ground for a refusal. The remonstrants, while admitting that they could not successfully compete in the cost and price of electric light with the gas company, which was also the stronger financially, expressed the opinion that it was unfair, after their efforts and outlay to meet the public need, that they should be placed in a position which must lead to unequal competition.

Early in the proceedings a willingness or desire was shown on the part of the gas company to purchase the Edison plant at what the former might deem a fair valuation, and, perhaps, an equal disposition was manifested on the part of the Edison people in favor of a sale. To this end negotiations were carried on until the gas company made an offer, to remain open for thirty days,

for the property of the Edison company; and the holders of the Edison stock, or nearly all of it, made a proposition to sell the same at a stated price. The difference in the two proposals, on a money basis, was not so great that either could be regarded as unreasonable or unfair, and either could be accepted without doing marked injustice. Both companies showed an intention to deal fairly. Such being the situation, the Board felt that they would undoubtedly come together upon equitable terms, and that the people of Lawrence would be greatly benefited in the end and permanently by favorable action on the petition. The authority asked for was accordingly granted the gas company.

Incidentally the question has arisen, how far a gas company ought to limit itself by contract to the use of any one system of electric lighting. The Board regards such restrictions as impolitic and unwise, and has advised against them. A company proposing to supply a community with the light it may need ought to be free to adopt any and all improvements which the future may develop, and however meritorious or wonderful the inventions and devices of to-day, it can scarcely be doubted that others still better will be discovered hereafter.

At the close of the year petitions of the gas companies in Chelsea, New Bedford and Holyoke for authority to furnish electric light were pending before the Board.

CONCLUSION.

At some time it may be thought desirable to allow gas companies, if they supply electric light, to adopt a corporate name which shall indicate also that branch of their business, and to confer upon the Board authority, in its discretion, to investigate accidents caused by gas or electricity. These matters are perhaps not sufficient of themselves to call for legislative action, but ought properly be considered in connection with others more important if such should be proposed.

The statutes placing gas and electric light companies under the supervision of the Board are of such recent origin that it is not deemed expedient to suggest any specific modifications of them at the present time.

If legislation shall be sought affecting these companies or the business in which they are engaged, as will doubtless be the case, the members of the Board will always be ready to furnish to any legislative committee all information in their power.

ABRAHAM B. COFFIN,
EDWARD T. ROWELL,
FORREST E. BARKER,

Board of Gas Commissioners.

JAN. 3, 1888.

APPENDIX A.

BALANCE SHEETS JUNE 30, 1887.

ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$20,600 00
Machinery and manufacturing appliances, }	5,720 42
Street mains, }	
Meters, }	
Cash on hand,	128 00
Due for gas,	1,922 17
Other accounts due the Company,	5,450 67
Coal on hand,	1,555 20
Tar on hand,	238 50
Office furniture,	200 00
Notes receivable,	3,076 44

Total assets, as per books of the Company, . . . \$38,891 40

LIABILITIES.

Capital stock,	\$17,300 00
Unpaid bills,	2,021 92

Total liabilities, as per books of the Company, . . \$19,321 92

Profit and loss balance, 19,569 48

\$38,891 40

AMESBURY AND SALISBURY GAS LIGHT COMPANY.

ASSETS.

Street mains, }	\$3,801 96
Meters, }	
Due for gas,	487 69

Total assets, as per books of the Company, . . . \$4,289 65

LIABILITIES.

Capital stock,	\$1,250 00
Unpaid bills,	1,017 25

Total liabilities, as per books of the Company, . . \$2,267 25

Profit and loss balance, 2,022 40

\$4,289 65

AMHERST GAS COMPANY.

ASSETS.

Real estate,	\$635 85
Machinery and manufacturing appliances,	7,722 81
Street mains,	6,124 81
Meters,	986 44
Cash on hand,	209 50
Due for gas,	574 49
Coke on hand,	47 50
Enrichers on hand,	346 04
Other materials on hand,	56 46

Total assets, as per books of the Company, \$16,703 90

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	1,500 00
Unpaid bills,	408 62

Total liabilities, as per books of the Company. . . . \$11,908 62

Profit and loss balance, 4,795 28

\$16,703 90

ARLINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,000 00
Machinery and manufacturing appliances,	35,000 00
Street mains,	34,000 00
Cash on hand,	4,345 82
Due for gas,	3,129 31
Coal on hand,	1,520 81

Total assets, as per books of the Company, \$78,995 94

LIABILITIES.

Capital stock,	\$70,000 00
Scrip,	162 00
Unpaid dividends,	714 00
Amounts due from the Company, not included above.	94 05

Total liabilities, as per books of the Company, . . . \$70,970 05

Profit and loss balance, 8,025 89

\$78,995 94

ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,058 16
Machinery and manufacturing appliances,	23,564 06
Street mains,	8,448 36
Meters,	1,652 56
Cash on hand,	732 46
Due for gas,	1,316 23
Other accounts due the Company,	77 90
Coal on hand,	1,510 00
Coke on hand,	35 00
Tar on hand,	150 00
Enrichers on hand,	4 40
Purifying materials on hand,	22 00
Fixtures on hand,	263 32
Office furniture,	129 40

Total assets, as per books of the Company, . . . \$40,963 85

LIABILITIES.

Capital stock,	\$23,200 00
Notes payable,	4,000 00

Total liabilities, as per books of the Company, . . . \$27,200 00

Profit and loss balance, 13,763 85

\$40,963 85

THE BAY STATE GAS COMPANY.

ASSETS.

Real estate,	\$76,000 00
Machinery and manufacturing appliances, }	500,000 00
Street mains and buildings, }	
Notes receivable,	50,956 16
Patent rights,	250,000 00

Total assets, as per books of the Company, . . . \$876,956 16

LIABILITIES.

Capital stock,	\$500,000 00
Bonds issued. [See note.]	

Total liabilities, as per books of the Company, . . . \$500,000 00

Profit and loss balance, 376,956 16

\$876,956 16

NOTE.—The company is indebted under the terms of a contract entered into and executed by it on the 11th day of March, A. D. 1885, by which contract it agreed to pay \$4,500,000 in ninety-nine years from said date, in consideration of a contract made with it of even date, for the erection and completion of its plant and works. The exact amount of its indebtedness cannot, therefore, be accurately stated until said contract is completed.

BEVERLY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$23,000 00
Machinery and manufacturing appliances,	8,000 00
Street mains,	15,000 00
Meters,	3,000 00
Cash on hand,	396 33
Due for gas,	2,171 52
Other accounts due the Company,	190 02
Coal on hand,	720 35
Coke on hand,	1 00
Tar on hand,	85 00
Enrichers on hand,	32 00
Other materials on hand,	50 00
Fixtures on hand,	240 52
Office furniture,	239 00

Total assets, as per books of the Company, . . . \$53,125 74

LIABILITIES.

Capital stock,	\$40,000 00
Special stock,	11,800 00
Unpaid bills,	1,056 95

Total liabilities, as per books of the Company, . . \$52,856 95

Profit and loss balance, 268 79

\$53,125 74

BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,354,814 86
Machinery and manufacturing appliances,	950,000 00
Street mains,	250,000 00
Meters,	5,000 00
Cash on hand,	186,443 01
Due for gas,	157,651 71
Coal on hand,	89,691 12
Coke on hand,	4,472 00
Tar and ammoniacal liquor on hand,	4,235 87
Enrichers on hand,	25,384 52
Purifying materials on hand,	1,500 00
Other materials on hand,	22,607 14

Total assets, as per books of the Company, . . \$3,051,800 23

LIABILITIES.

Capital stock,	\$2,500,000 00
Unpaid bills,	42,245 56
Deposits,	15,709 00
Unpaid dividends,	7,262 50
Depreciation fund. for insurance, bad debts, etc.,	330,491 42
<hr/>	
Total liabilities, as per books of the Company,	\$2,895,708 48
Profit and loss balance,	156,091 75
<hr/>	
	\$3,051,800 23

BROCKTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$49,000 00
Machinery and manufacturing appliances, }	59,171 74
Street mains, }	
Meters, }	
Cash on hand,	2,600 58
Coal on hand,	365 36
Other materials on hand,	94 13
Stoves on hand,	401 91
<hr/>	
Total assets, as per books of the Company,	\$111,633 72

LIABILITIES.

Capital stock,	\$64,000 00
Bonds issued,	35,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$99,000 00
Profit and loss balance,	12,633 72
<hr/>	
	\$111,633 72

BROOKLINE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$147,700 00
Machinery and manufacturing appliances,	41,045 60
Street mains,	199,584 45
Meters,	9,097 35
Cash on hand,	2,516 43
Due for gas,	14,991 40
Other accounts due the Company,	2,379 00
Coal on hand,	4,725 00
Coke on hand,	100

Enrichers on hand,	\$106 87
Purifying materials on hand,	471 00
Other materials on hand,	1,085 69
Horses, wagons, etc.,	1,730 00
Office furniture,	460 00
Notes receivable,	5,000 00

Total assets, as per books of the Company, . . . \$430,992 79

LIABILITIES.

Capital stock,	\$350,000 00
Notes payable,	55,000 00
Unpaid bills,	2,113 52
Deposits,	224 00

Total liabilities, as per books of the Company, . . \$407,337 52

Profit and loss balance, 23,655 27

\$430,992 79

CAMBRIDGE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$64,547 01
Machinery and manufacturing appliances,	658,371 24
Street mains,	2,690 02
Cash on hand,	8,032 32
Due for gas,	31,845 17
Other accounts due the Company,	2,938 44
Coal on hand,	7,786 28
Coke on hand,	1,200 00
Tar on hand,	225 00
Purifying materials on hand,	300 00
Other materials on hand,	5,447 44
Notes receivable,	257 00
Investments,	104,567 46

Total assets, as per books of the Company, . . . \$888,207 38

LIABILITIES.

Capital stock,	\$700,000 00
Unpaid bills,	2,080 59
Deposits,	875 00
Unpaid dividends,	70 00
Amounts due from the Company, not included above,	45 00

Total liabilities, as per books of the Company, . . \$703,070 59

Profit and loss balance, 185,136 79

\$888,207 38

CHARLESTOWN GAS COMPANY.

ASSETS.

Real estate,	}	.	.	\$518,271 97
Machinery and manufacturing appliances,				
Street mains,				
Meters,				
Cash on hand,	.	.	.	2,034 00
Due for gas,	.	.	.	16,906 55
Other accounts due the Company,	.	.	.	2,328 35
Coal on hand,	.	.	.	9,002 29
Enrichers on hand,	.	.	.	621 80
Investments,	.	.	.	35,950 00
Total assets, as per books of the Company,				\$585,114 96

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	\$500,000 00
Notes payable,	.	.	.	.	.	.	.	12,000 00
Unpaid bills,	.	.	.	.	.	.	.	2,116 62
Deposits,	.	.	.	.	.	.	.	480 50
Unpaid dividends,	.	.	.	.	.	.	.	945 00
Reserved fund,	.	.	.	.	.	.	.	35,950 00
Suspense account,	.	.	.	.	.	.	.	404 77
Total liabilities, as per books of the Company,				.	.	.	.	\$551,896 89
Profit and loss balance,	.	.	.	.	.	.	.	33,218 07
								\$585,114 96

CHELSEA GAS LIGHT COMPANY.

ASSETS.

Real estate,	.	.	.	.	.	.	.	\$161,822 79
Machinery and manufacturing appliances,	}	.	.	.	150,000 00			
Street mains,								
Meters,								
Cash on hand,	.	.	.	.	.	.	.	9,201 61
Due for gas,	.	.	.	.	.	.	.	8,513 26
Other accounts due the Company,	.	.	.	.	.	.	.	708 28
Tar on hand,	.	.	.	.	.	.	.	200 00
Stoves and Lungren burners on hand,	.	.	.	.	.	.	.	744 07
Total assets, as per books of the Company,				.	.	.	.	\$331,190 01

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	\$300,000 00
Deposits,	.	.	.	.	.	.	.	690 00
Unpaid dividends,	.	.	.	.	.	.	.	96 00
Total liabilities, as per books of the Company,				.	.	.	.	\$300,786 00
Profit and loss balance,	.	.	.	.	.	.	.	30,404 01
								\$331,190 01

CHICOPEE GAS WORKS.

ASSETS.

Real estate,	}	. . .	\$30,000 00
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			314 00
Other accounts due the Company,			190 00
Coal on hand,			1,252 00
Coke on hand,			18 00
Purifying materials on hand,			64 00
Notes receivable,			32,800 00
Total assets, as per books of the Company,			\$64,638 00

LIABILITIES.

Capital stock,	\$30,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$30,000 00
Profit and loss balance,	34,638 00
<hr/>	
	\$64,638 00

CITIZENS' GAS LIGHT COMPANY OF QUINCY.

ASSETS.

Real estate,	}	. . .	\$42,894 76
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			369 28
Due for gas,			908 31
Coal on hand,			1,529 06
Coke on hand,			20 00
Tar on hand,			30 00
Enrichers on hand,			12 00
Purifying materials on hand,			50 00
Stoves on hand,			100 00
Fixtures on hand,			200 00
Horses, wagons, etc.,			150 00
Office furniture,			100 00
Total assets, as per books of the Company,			\$46,363 41
Profit and loss balance,			676 09
			\$47,039 50

LIABILITIES.

Capital stock,	\$33,000 00
Notes payable,	13,514 50
Unpaid bills,	250 00
Interest due but not paid,	275 00

Total liabilities, as per books of the Company, . . . \$47,039 50

CITIZENS' GAS LIGHT COMPANY OF SOUTH READING.

ASSETS.

Real estate,	}	. . . \$95,300 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		3,366 24
Due for gas,		3,536 56
Coal on hand,		405 76
Tar on hand,		150 00
Purifying materials on hand,		7 04

Total assets, as per books of the Company, . . . \$102,765 60

* LIABILITIES.

Capital stock,	\$95,300 00
Unpaid dividends,	286 00

Total liabilities, as per books of the Company, . . . \$95,586 00

Profit and loss balance, 7,179 60

\$102,765 60

CLINTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . \$27,000 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		3,798 80
Coal on hand,		1,237 61
Coke on hand,		48 08
Tar on hand,		273 00
Enrichers on hand,		1 59
Purifying materials on hand,		100 00
Other materials on hand,		381 16
Office furniture,		200 00

Total assets, as per books of the Company, . . . \$42,440 24

LIABILITIES.

Capital stock,	\$35,000 00
Total liabilities, as per books of the Company, . . .	\$35,000 00
Profit and loss balance,	7,440 24
	<hr/> \$42,440 24

COTTAGE CITY GAS COMPANY.

ASSETS.

Real estate,	\$500 00
Machinery and manufacturing appliances, }	60,004 25
Street mains, }	
Meters, }	
Electric light plant,	20,000 00
Cash on hand,	282 64
Other accounts due the Company,	24 70
Total assets, as per books of the Company,	\$80,811 59
Profit and loss balance,	827 51
	<hr/> \$81,639 10

LIABILITIES.

Capital stock,	\$60,000 00
Notes payable,	21,240 00
Amounts due from the Company, not included above, . . .	399 10
Total liabilities, as per books of the Company,	\$81,639 10

DANVERS GAS LIGHT COMPANY.

ASSETS.

Construction account,	\$20,000 00
Street mains,	21 00
Meters,	65 25
Cash on hand,	128 98
Due for gas,	118 26
Other accounts due the Company,	97 05
Coal on hand,	840 26
Tar on hand,	18 75
Office furniture,	35 00
Total assets, as per books of the Company,	\$21,324 55
Profit and loss balance,	1,035 72
	<hr/> \$22,360 27

LIABILITIES.

Capital stock,	\$20,000 00
Bonds issued,	2,000 00
Unpaid bills,	360 27

Total liabilities, as per books of the Company, . . . \$22,360 27

DEDHAM AND HYDE PARK GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$8,009 05
Machinery and manufacturing appliances,	13,267 41
Street mains,	19,660 23
Meters,	1,553 74
Cash on hand,	24 07
Due for gas,	671 69
Other accounts due the Company,	175 84
Coal on hand,	4,350 58
Coke on hand,	27 00
Tar on hand,	226 50
Other materials on hand,	100 00
Horses, wagons, etc.,	240 00
Office furniture,	141 00

Total assets, as per books of the Company, . . . \$48,447 11

Profit and loss balance, 62,949 64

\$111,396 75

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	11,000 00
Unpaid bills,	396 75

Total liabilities, as per books of the Company, . . . \$111,396 75

DORCHESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . .	\$451,873 95
Machinery and manufacturing appliances,			
Street mains,			
Meters,			1,939 95
Cash on hand,			6,772 80

Due for gas,	\$9,759 73
Other accounts due the Company,	3,228 18
Coal on hand,	12,977 35
Coke on hand,	71 25
Tar on hand,	30 00
Enrichers on hand,	336 11
Purifying materials on hand,	286 00
Other materials on hand,	3,043 75
Fixtures on hand,	179 00
Notes receivable,	30,000 00

Total assets, as per books of the Company, . . . \$520,498 07

LIABILITIES.

Capital stock,	\$400,000 00
Unpaid bills,	9,409 90
Deposits,	35 00

Total liabilities, as per books of the Company, . . \$409,444 90

Profit and loss balance, 111,053 17

\$520,498 07

EAST BOSTON GAS COMPANY.

ASSETS.

Real estate,	}	. . .	\$221,731 91
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			16,466 17
Due for gas,			5,019 06
Coal on hand,			2,382 47
Purifying materials on hand,			194 70
Other materials on hand,			2,367 56
Investments,			34,000 00

Total assets, as per books of the Company, . . . \$282,161 87

LIABILITIES.

Capital stock,	\$220,000 00
Unpaid dividends,	8,800 00
Amounts due from the Company, not included above,	6 30

Total liabilities, as per books of the Company, . . \$228,806 30

Profit and loss balance, 53,355 57

\$282,161 87

EASTHAMPTON GAS COMPANY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	10,500 00
Street mains,	8,000 00
Meters,	500 00
Cash on hand,	1,933 04
Due for gas,	1,095 10
Other accounts due the Company,	2 36
Coal on hand,	78 75
Tar on hand,	18 75
Enrichers on hand,	109 75
Purifying materials on hand,	103 60
Other materials on hand,	68 70
Notes receivable,	3,000 00

Total assets, as per books of the Company, \$34,910 05

LIABILITIES.

Capital stock,	\$30,000 00
Unpaid bills,	151 39

Total liabilities, as per books of the Company, \$30,151 39

Profit and loss balance, 4,758 66

\$34,910 05

FALL RIVER GAS WORKS COMPANY.

ASSETS.

Real estate,	\$150,000 00
Machinery and manufacturing appliances,	35,000 00
Street mains,	75,000 00
Meters,	514 01
Cash on hand,	18,939 38
Due for gas,	4,075 72
Other accounts due the Company,	3,973 70
Coal on hand,	1,855 93
Coke on hand,	106 61
Tar on hand,	67 20
Purifying materials on hand,	262 00
Other materials on hand,	5,151 82
Stoves on hand,	1,150 75
Fixtures on hand,	769 25
Horses, wagons, etc.,	86 40
Office furniture,	403 96
Extensions, gas on hand, etc.,	17,664 94

Total assets, as per books of the Company, \$315,021 67

LIABILITIES.

Capital stock,	\$288,000 00
Unpaid bills,	9,835 80
Deposits,	218 30
<hr/>	
Total liabilities, as per books of the Company, . . .	\$298,054 10
Profit and loss balance,	16,967 57
<hr/>	
	\$315,021 67

FITCHBURG GAS COMPANY.

ASSETS.

Real estate,	\$32,000 00
Machinery and manufacturing appliances, }	20,874 85
Street mains,	
Meters,	
Cash on hand,	6,799 18
Due for gas,	587 45
Coal on hand,	300 00
Fixtures on hand,	419 93
Notes receivable,	4,564 37
<hr/>	
Total assets, as per books of the Company,	\$65,545 78

LIABILITIES.

Capital stock,	\$60,000 00
Reserved fund,	5,545 78
<hr/>	
Total liabilities, as per books of the Company,	\$65,545 78

GLOUCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$27,000 00
Machinery and manufacturing appliances,	12,835 00
Street mains,	20,000 00
Meters,	2,465 00
Cash on hand,	3,209 84
Due for gas,	3,322 16
Other accounts due the Company,	2,432 94
Coal on hand,	3,026 10
Tar on hand,	360 00
Purifying materials on hand,	113 00
Other materials on hand,	605 00
Stoves on hand,	40 00

Fixtures on hand,	\$800 00
Office furniture,	160 00
Notes receivable,	85 54
Investments,	13,500 00

Total assets, as per books of the Company, . . . \$89,954 58

LIABILITIES.

Capital stock,	\$62,300 00
Unpaid bills,	1,782 57

Total liabilities, as per books of the Company, . . \$64,082 57

Profit and loss balance, 25,872 01

\$89,954 58

GREENFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			
Street mains,			\$44,439 98
Meters,			2,790 48
Cash on hand,			1,353 48
Due for gas,			2,656 04
Coal on hand,			404 75
Coke on hand,			210 00
Enrichers on hand,			120 00
Purifying materials on hand,			10 50
			15 00

Total assets, as per books of the Company, . . . \$52,000 23

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	1,000 00

Total liabilities, as per books of the Company, . . \$51,000 00

Profit and loss balance, 1,000 23

\$52,000 23

HAVERHILL GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			\$75,000 00
Coal on hand,			796 82
Notes receivable,			2,781 25
Investments,			3,000 00
			10,300 00

Total assets, as per books of the Company, . . . \$91,878 07

LIABILITIES.

Capital stock,	\$75,000 00
Total liabilities, as per books of the Company, . . .	\$75,000 00
Profit and loss balance,	16,878 07
	<hr/>
	\$91,878 07

IPSWICH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,400 00
Machinery and manufacturing appliances,	2,000 00
Street mains,	5,000 00
Meters,	1,200 00
Cash on hand,	22 86
Due for gas,	204 00
Coal on hand,	64 00

Total assets, as per books of the Company,	\$11,890 86
Profit and loss balance,	12,779 79
	<hr/>
	\$24,670 65

LIABILITIES.

Capital stock,	\$16,000 00
Bonds issued,	6,600 00
Notes payable,	400 00
Unpaid bills,	1,466 65
Interest due but not paid,	204 00

Total liabilities, as per books of the Company,	\$24,670 65
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JAMAICA PLAIN GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	\$258,876 05
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			15,755 88
Due for gas,			209 86
Other accounts due the Company,			513 56
Coal on hand,			6,006 00
Coke on hand,			400 00
Enrichers on hand,			195 00

Other materials on hand,	\$600 00
Stoves and lamps on hand,	115 85
Notes receivable,	500 00

Total assets, as per books of the Company, . . . \$283,172 20

LIABILITIES.

Capital stock,	\$200,000 00
Notes payable,	40,000 00

Total liabilities, as per books of the Company, . . . \$240,000 00

Profit and loss balance, 43,172 20

\$283,172 20

LAWRENCE GAS COMPANY.

ASSETS.

Real estate,	}	. . . \$400,000 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		8,250 59
Due for gas,		5,900 44
Coal on hand,		10,619 48
Coke on hand,		1,170 81
Tar on hand,		1,175 20
Enrichers on hand,		444 38
Purifying materials on hand,		1,670 00
Other materials on hand,		11,358 32
Stoves and fixtures on hand,		5,230 43
Gas on hand,		343 80
Suspense account,		13,469 64
Notes receivable,		1,000 00
Investments,		98 16

Total assets, as per books of the Company, . . . \$460,731 25

LIABILITIES.

Capital stock,	\$400,000 00
Notes payable,	33,500 00
Deposits,	29 00

Total liabilities, as per books of the Company, . . . \$433,529 00

Profit and loss balance, 27,202 25

\$460,731 25

LEOMINSTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		1,826 52
Cash on hand,		968 31

Total assets, as per books of the Company, . . . \$57,580 49

LIABILITIES.

Capital stock, \$50,000 00

Total liabilities, as per books of the Company, . . \$50,000 00

Profit and loss balance, 7,580 49

\$57,580 49

LEXINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,514 95
Machinery and manufacturing appliances,	21,340 11
Street mains,	5,988 77
Meters,	507 69
Cash on hand,	315 65
Due for gas,	590 25
Other accounts due the Company,	10 80
Coal on hand,	11 00
Enrichers on hand,	13 00
Other materials on hand,	355 87
Notes receivable,	546 00

Total assets, as per books of the Company, . . . \$31,194 09

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	3,272 30
Unpaid bills,	329 45
Interest due but not paid,	21 33

Total liabilities, as per books of the Company, . . \$23,623 08

Profit and loss balance, 7,571 01

\$31,194 09

LOWELL GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$75,000 00
Machinery and manufacturing appliances, } Street mains, } Meters, }	425,000 00
Cash on hand,	32,221 36
Coal on hand,	10,120 00
Enrichers on hand,	258 15
Purifying materials on hand,	270 00
Stoves on hand,	2,113 00
New holder,	65,036 14
Total assets, as per books of the Company,	<u>\$610,018 65</u>

LIABILITIES.

Capital stock,	\$500,000 00
Total liabilities, as per books of the Company,	<u>\$500,000 00</u>
Profit and loss balance,	110,018 65
	<u>\$610,018 65</u>

LYNN GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$180,000 00
Machinery and manufacturing appliances, } Street mains, }	120,000 00
Cash on hand,	10,975 20
Due for gas,	12,130 18
Other accounts due the Company,	697 99
Coal on hand,	1,648 96
Tar on hand,	367 50
Enrichers on hand,	230 00
Purifying materials on hand,	105 00
Other materials on hand,	1,093 49
Stoves on hand,	108 43
Notes receivable,	19,031 79
Total assets, as per books of the Company,	<u>\$346,388 54</u>

LIABILITIES.

Capital stock,	\$300,000 00
Unpaid bills,	309 60
Deposits,	44 47
Unpaid dividends,	18 00
Total liabilities, as per books of the Company,	<u>\$300,372 07</u>
Profit and loss balance,	46,016 47
	<u>\$346,388 54</u>

MALDEN AND MELROSE GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		585 40
Cash on hand,		8,099 34
Due for gas,		10,266 28
Other accounts due the Company,		1,806 40
Coal on hand,		1,722 60
Tar on hand,		150 00
Fixtures on hand,		2,377 53
Notes receivable,		57 10
Pipe account, extensions, etc.,		4,458 85
Total assets, as per books of the Company,		\$252,398 99

LIABILITIES.

Capital stock,	\$170,000 00
Bonds issued,	50,000 00
Notes payable,	500 00
Unpaid bills,	4,687 75
Unpaid dividends,	862 50
Total liabilities, as per books of the Company,	\$226,050 25
Profit and loss balance.	26,348 74
	<hr/>
	\$252,398 99

MANUFACTURERS' GAS LIGHT COMPANY (FALL RIVER).

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		1,488 36
Due for gas,		854 98
Coal on hand,		1,175 00
Coke on hand,		35 00
Tar on hand,		25 00
Stoves on hand,		55 55
Total assets, as per books of the Company,		\$50,633 89

LIABILITIES.

Capital stock,	\$50,000 00
Total liabilities, as per books of the Company,	\$50,000 00
Profit and loss balance,	633 89
	<hr/>
	\$50,633 89

MARBLEHEAD GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$4,957 91
Machinery and manufacturing appliances, }	21,706 71
Street mains,	
Meters,	1,607 25
Cash on hand,	235 75
Due for gas,	502 77
Coal on hand,	1,030 00
Other materials on hand,	50 00
Stoves on hand,	55 00
Office furniture,	200 00
Investments,	106 25

Total assets, as per books of the Company,	\$30,451 64
Profit and loss balance,	11,384 23

\$41,835 87

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	1,500 00
Unpaid bills,	332 87
Unpaid dividends,	3 00

Total liabilities, as per books of the Company,	\$41,835 87
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MARLBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$5,500 00
Machinery and manufacturing appliances,	57,401 28
Street mains,	664 42
Meters,	1,089 35
Cash on hand,	673 79
Due for gas,	4,500 79
Other accounts due the Company,	417 36
Coal on hand,	687 50
Tar on hand,	50 00
Enrichers on hand,	47 52
Notes receivable,	154 72

Total assets, as per books of the Company,	\$71,285 73
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LIABILITIES.

Capital stock,	\$50,000 00
Unpaid dividends,	2,575 00
Amounts due from the Company, not included above,	8 62

Total liabilities, as per books of the Company,	\$52,583 62
Profit and loss balance,	18,402 11

\$71,285 73

MILFORD GAS LIGHT COMPANY.

ASSETS.	
Real estate,	}
Machinery and manufacturing appliances,	
Street mains,	
Meters,	
Cash on hand,	3,122 22
Due for gas,	879 20
Coal on hand,	525 00
Coke on hand,	107 00
Tar on hand,	237 00
Purifying materials on hand,	66 00
Other materials on hand,	350 00
Office furniture,	50 00
<hr/>	
Total assets, as per books of the Company,	\$106,402 42
LIABILITIES.	
Capital stock,	\$72,300 00
<hr/>	
Total liabilities, as per books of the Company,	\$72,300 00
Profit and loss balance,	34,102 42
<hr/>	
	\$106,402 42

MILLER'S RIVER GAS LIGHT COMPANY (ATHOL).

ASSETS.	
Real estate,	}
Machinery and manufacturing appliances,	
Street mains,	
Meters,	
Cash on hand,	487 38
Due for gas,	144 08
Other accounts due the Company,	617 81
Coal on hand,	150 00
Enrichers on hand,	17 50
Purifying materials on hand,	10 00
Other materials on hand,	160 00
<hr/>	
Total assets, as per books of the Company,	\$61,586 77
Profit and loss balance,	4,313 41
<hr/>	
	\$65,900 18
LIABILITIES.	
Capital stock,	\$40,000 00
Bonds issued,	20,000 00

Notes payable,	\$706 38
Unpaid bills,	898 70
Amounts due from the Company, not included above,	4,295 10

Total liabilities, as per books of the Company, . . . \$65,900 18

MUTUAL GAS LIGHT COMPANY OF SOUTHBRIDGE.

ASSETS.

Real estate,	\$5,515 49
Machinery and manufacturing appliances,	1,041 83
Street mains,	6,837 25
Meters,	1,064 90
Cash on hand,	733 12
Due for gas,	253 05
Other accounts due the Company,	325 53
Tar on hand,	17 50
Other materials on hand,	355 97
Fixtures on hand,	62 70
Notes receivable,	81 71

Total assets, as per books of the Company, . . . \$16,289 05

LIABILITIES.

Capital stock,	\$15,000 00
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Total liabilities, as per books of the Company, . . . \$15,000 00

Profit and loss balance, 1,289 05

\$16,289 05

NATICK GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$16,500 00
Machinery and manufacturing appliances, }	20,813 68
Street mains, }	
Meters, }	
Cash on hand,	1,454 43
Due for gas,	1,742 28
Coal on hand,	165 85
Coke on hand,	129 60
Tar on hand,	80 00
Other materials on hand,	41 08
Stoves on hand,	82 25
Fixtures on hand,	416 50

Total assets, as per books of the Company, . . . \$41,425 67

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	10,000 00
<hr/>	
Total liabilities, as per books of the Company, . . .	\$30,000 00
Profit and loss balance,	11,425 67
<hr/>	
	\$41,425 67

NANTUCKET GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,000 00
Machinery and manufacturing appliances,	20,000 00
Street mains,	9,390 57
Meters,	4,000 00
Cash on hand,	142 05
Due for gas,	79 87
Other accounts due the Company,	781 93
Coal on hand,	417 55
Coke on hand,	20 00
Tar on hand,	50 00
Notes receivable,	2,000 00
Investments,	368 00

Total assets, as per books of the Company, . . . \$40,249 97

LIABILITIES.

Capital stock,	\$36,000 00
<hr/>	
Total liabilities, as per books of the Company, . . .	\$36,000 00
Profit and loss balance,	4,249 97
<hr/>	
	\$40,249 97

NEW BEDFORD GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	\$161,164 08
Machinery and manufacturing appliances,		
Street mains,		115,449 66
Meters,		31,082 22
Cash on hand,		825 70
Due for gas,		7,380 22
Other accounts due the Company,		4,444 41
Coal on hand,		4,392 00

Coke on hand,	\$45 50
Tar on hand,	415 25
Enrichers on hand,	240 00
Purifying materials on hand,	373 62
Other materials on hand,	661 50
Stoves on hand,	7,680 87
Fixtures on hand,	8,626 75
Notes receivable,	298 60
Street light account,	2,100 00

Total assets, as per books of the Company, . . . \$345,180 38

LIABILITIES.

Capital stock,	\$225,000 00
Notes payable,	51,000 00
Unpaid bills,	5,241 41
Deposits,	159 00
Unpaid dividends,	4,500 00
Reserved fund,	41,949 46
Insurance fund,	9,067 96
Amounts due from the Company, not included above,	2,500 00

Total liabilities, as per books of the Company, . . . \$339,417 83

Profit and loss balance, 5,762 55

\$345,180 38

NEWBURYPORT GAS COMPANY.

ASSETS.

Real estate,	\$1,132 43
Machinery and manufacturing appliances,	75,000 00
Street mains,	1,629 74
Meters,	882 61
Cash on hand,	810 24
Due for gas,	2,272 70
Other accounts due the Company,	776 76
Coal on hand,	2,589 88
Coke on hand,	24 00
Tar on hand,	34 00
Enrichers on hand,	7 20
Purifying materials on hand,	44 25
Other materials on hand,	161 50
Stoves on hand,	10 00
Fixtures on hand,	110 00
Notes receivable,	5,318 75

Total assets, as per books of the Company, . . . \$90,804 06

LIABILITIES.

Capital stock,	\$80,000 00
Unpaid dividends,	166 50
Total liabilities, as per books of the Company, . . .	\$80,166 50
Profit and loss balance,	10,637 56
	<hr/> \$90,804 06

NEWTON AND WATERTOWN GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . \$269,997 12
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		15,780 67
Due for gas,		16,343 19
Other accounts due the Company,		2,177 80
Coal on hand,		1,514 13
Coke on hand,		137 50
Tar on hand,		300 00
Enrichers on hand,		37 50
Purifying materials on hand,		100 00
Other materials on hand,		1,572 00
Stoves and fixtures on hand,		1,372 56
Office furniture,		371 75
Notes receivable,		576 76
Investments,		7,395 27
Total assets, as per books of the Company,		<hr/> \$317,676 25

LIABILITIES.

Capital stock,	\$200,000 00
Deposits,	25 00
Unpaid dividends,	464 00
Contingent account,	25,000 00
Total liabilities, as per books of the Company,	\$225,489 00
Profit and loss balance,	92,187 25
	<hr/> \$317,676 25

NORTH ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . \$50,000 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		3,713 00
		4,031 57

Due for gas,	\$2,026 61
Coke on hand,	72 00
Tar on hand,	242 50
Other materials on hand,	100 00
Stoves and fixtures on hand,	1,884 65
Horses, wagons, etc.,	601 75
Office furniture,	719 75
Investments,	2,000 00

Total assets, as per books of the Company, . . . \$65,391 83

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	4,000 00

Total liabilities, as per books of the Company, . . \$54,000 00

Profit and loss balance, 11,391 83

\$65,391 83

NORTHAMPTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$30,000 00
Machinery and manufacturing appliances,	3,000 00
Street mains,	20,000 00
Construction,	743 33
Cash on hand,	5,864 00
Accounts due the Company,	271 76
Coke on hand,	24 00
Tar on hand,	100 00
Enrichers on hand,	155 30
Purifying materials on hand,	86 58
Other materials on hand,	840 33
Lamps on hand,	69 80
Investments,	3,250 00

Total assets, as per books of the Company, . . . \$64,405 10

LIABILITIES.

Capital stock,	\$50,000 00
Unpaid bills,	64 40
Reserved fund,	5,418 50

Total liabilities, as per books of the Company, . . \$55,482 90

Profit and loss balance, 8,922 20

\$64,405 10

NORTH ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$47,474 72
Machinery and manufacturing appliances,	28,550 20
Street mains,	40,064 81
Meters,	5,183 98
Cash on hand,	1,842 28
Due for gas,	1,355 40
Other accounts due the Company,	287 31
Coal on hand,	4,511 66
Coke on hand,	14 46
Tar on hand,	141 13
Enrichers on hand,	6 49
Purifying materials on hand,	90 00
Other materials on hand,	36 72
Stoves on hand,	263 46
Fixtures on hand,	1,379 35
Office furniture,	350 00
Notes receivable,	18,000 00
<hr/>	
Total assets, as per books of the Company,	\$149,551 97

LIABILITIES.	
Capital stock,	\$68,100 00
Bonds issued (dividend scrip),	68,100 00
Unpaid bills,	101 17
Unpaid dividends,	2,043 00
Interest due, but not paid,	1,021 50
<hr/>	
Total liabilities, as per books of the Company,	\$139,365 67
Profit and loss balance,	10,186 30
<hr/>	
\$149,551 97	

NORWOOD GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$3,000 00
Machinery and manufacturing appliances, }	6,400 00
Street mains, }	
Meters,	639 65
LIABILITIES.	
Capital stock,	\$12,000 00
Balance Sheet as returned.	

PITTSFIELD COAL-GAS COMPANY.

ASSETS.	
Real estate,	\$22,500 00
Machinery and manufacturing appliances,	14,350 00

Street mains,	\$19,110 00
Meters,	6,540 00
Cash on hand,	12,413 50
Due for gas,	3,201 44
Coal on hand,	793 50
Coke on hand,	70 00
Enrichers on hand,	1,300 00
Purifying materials on hand,	100 00
Notes receivable,	27,071 25
Investments,	3,550 00

Total assets, as per books of the Company, . . . \$110,999 69

LIABILITIES.

Capital stock,	\$62,500 00
Unpaid bills,	2,000 00
Reserved fund,	40,000 00

Total liabilities, as per books of the Company, . . . \$104,500 00

Profit and loss balance, 6,499 69

\$110,999 69

PLYMOUTH GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . . \$40,000 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		167 26
Due for gas,		1,401 43
Other accounts due the Company,		561 73
Coal on hand,		642 56
Coke on hand,		38 25
Tar on hand,		30 00
Enrichers on hand,		78 06
Other materials on hand,		474 41
Stoves on hand,		28 72
Fixtures on hand,		837 44
Investments,		2,500 00

Total assets, as per books of the Company, . . . \$46,759 86

LIABILITIES.

Capital stock,	\$40,000 00
Unpaid bills,	575 54
Unpaid dividends,	48 00
Amounts due from the Company, not included above,	75 71

Total liabilities, as per books of the Company, . . . \$40,699 25

Profit and loss balance (if surplus), 6,060 61

\$46,759 86

ROXBURY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$116,365 91
Machinery and manufacturing appliances,	293,266 45
Street mains,	228,321 92
Meters,	47,506 96
Cash on hand,	31,700 44
Due for gas,	26,275 97
Other accounts due the Company,	1,298 70
Coal on hand,	12,368 90
Enrichers on hand,	224 25
Purifying materials on hand,	800 00
Other materials on hand,	5,286 70
Notes receivable,	198,000 00

Total assets, as per books of the Company, . . . \$961,416 20

LIABILITIES.

Capital stock,	\$600,000 00
Unpaid bills,	1,074 63
Deposits,	2,551 00
Reserved fund,	115,000 00

Total liabilities, as per books of the Company, . . \$718,625 63
 Profit and loss balance, 242,790 57

\$961,416 20

SALEM GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . .	\$253,085 72
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			80,673 46
Due for gas,			10,419 08
Other accounts due the Company,			8,302 84
Coal on hand,			5,796 07
Tar on hand,			2,000 00
Enrichers on hand,			1,139 57
Purifying materials on hand,			800 00
Other materials on hand,			2,810 65
Horses, wagons, etc.,			850 00
Office furniture,			200 00
Notes receivable,			8,000 00
Investments,			17,420 49

Total assets, as per books of the Company, . . \$391,497 88

LIABILITIES.

Capital stock,	\$300,000 00
Deposits,	385 00
Depreciation fund,	19,464 76
Amounts due from the Company, not included above,	2,780 00

Total liabilities, as per books of the Company,	\$322,629 76
Profit and loss balance,	68,868 12
	<hr/>
	\$391,497 88

SOUTH BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$200,909 76
Machinery and manufacturing appliances, }	235,754 70
Street mains,	
Meters,	16,171 87
Cash on hand,	2,118 00
Due for gas,	10,477 63
Other accounts due the Company,	1,227 90
Coal on hand,	14,532 91
Enrichers on hand,	104 89
Purifying materials on hand,	553 00
Other materials on hand,	487 60
Stoves on hand,	520 03
Horses, wagons, etc.,	1,200 00
Office furniture,	238 85
Investments,	26,000 00

Total assets, as per books of the Company,	\$510,297 14
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LIABILITIES.

Capital stock,	\$440,000 00
Notes payable,	20,000 00
Unpaid bills,	1,580 83
Deposits,	1,349 05
Unpaid dividends,	17,600 00

Total liabilities, as per books of the Company,	\$480,529 88
Profit and loss balance,	29,767 26
	<hr/>
	\$510,297 14

SPENCER GAS COMPANY.

ASSETS.

Real estate,	\$20,478 78
Machinery and manufacturing appliances,	68,371 03
Street mains,	28,000 00

Meters,	\$1,673 40
Cash on hand,	8,476 79
Due for gas,	2,448 75
Other accounts due the Company,	2,043 68
Coke on hand,	50 00
Tar on hand,	20 00
Enrichers on hand,	27 50
Purifying materials on hand,	5 00
Other materials on hand,	2,748 17
Stoves on hand,	150 00
Fixtures on hand,	1,251 59
Office furniture,	50 00
Electric light plant,	23,000 00

Total assets, as per books of the Company, . . \$158,794 69

LIABILITIES.

Capital stock,	\$75,000 00
Bonds issued,	75,000 00

Total liabilities, as per books of the Company, . . \$150,000 00
 Profit and loss balance, 8,794 69

\$158,794 69

SPRINGFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$84,385 07
Machinery and manufacturing appliances,	230,176 83
Street mains and services,	173,261 69
Meters,	25,295 35
Extension account, work in process,	25,140 95
Cash on hand,	24,180 32
Due for gas,	4,207 25
Other accounts due the Company,	5,699 33
Coal on hand,	10,089 67
Enrichers on hand,	875 11
Purifying materials on hand,	182 32
Other materials on hand,	7,867 66
Stoves on hand,	651 07
Gas-engines and burners on hand,	1,416 42
Horses, wagons, etc.,	2,200 00
Office furniture,	1,275 00
Notes receivable,	1,601 44
Steam heating,	63,695 92

Total assets, as per books of the Company. . . \$662,201 40

LIABILITIES.

Capital stock,	\$500,000 00
Unpaid bills,	1,503 05
Deposits,	611 00
Unpaid dividends,	2,015 00
Steam heating,	31,243 42

Total liabilities, as per books of the Company, . . .	\$535,372 47
Profit and loss balance,	126,828 93
	<hr/>
	\$662,201 40

TAUNTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$26,500 00
Machinery and manufacturing appliances,	52,477 38
Cash on hand,	8,940 22
Due for gas,	7,186 14
Other accounts due the Company,	2,181 84
Coal on hand,	794 00
Coke on hand,	14 00
Tar on hand,	750 00
Enrichers on hand,	4 41
Purifying materials on hand,	489 00
Other materials on hand,	245 05
Stoves on hand,	1,646 43
Fixtures on hand,	3,428 93

Total assets, as per books of the Company,	\$104,657 40
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LIABILITIES.

Capital stock,	\$80,000 00
Deposits,	98 00

Total liabilities, as per books of the Company, . . .	\$80,098 00
Profit and loss balance,	24,559 40
	<hr/>
	\$104,657 40

WALTHAM GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$19,162 97
Machinery and manufacturing appliances,	80,517 98
Street mains,	41,039 83
Meters,	4,845 07

Cash on hand,	\$3,939 53
Due for gas,	5,472 40
Other accounts due the Company,	924 98
Coal on hand,	1,409 80
Coke on hand,	162 50
Tar on hand,	612 50
Enrichers on hand,	29 12
Purifying materials on hand,	171 00
Other materials on hand,	458 46
Stoves on hand,	149 92
Fixtures on hand,	930 11
Horses, wagons, etc.,	1,132 70
Office furniture,	744 63
Electric light plant,	29,732 08
Total assets, as per books of the Company,	<u>\$191,435 58</u>

LIABILITIES.

Capital stock,	\$140,000 00
Bonds issued,	20,000 00
Notes payable,	10,000 00
Total liabilities, as per books of the Company,	<u>\$170,000 00</u>
Profit and loss balance,	21,435 58
	<u>\$191,435 58</u>

WESTFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$2,430 00
Machinery and manufacturing appliances,	29,642 02
Street mains,	14,529 26
Meters,	1,075 05
Cash on hand,	2,319 25
Due for gas,	2,509 15
Coal on hand,	2,334 93
Enrichers on hand,	210 01
Fixtures on hand,	20 60
Notes receivable,	86 24
Investments,	3,120 00
Total assets, as per books of the Company,	<u>\$58,276 51</u>

LIABILITIES.

Capital stock,	\$54,000 00
Total liabilities, as per books of the Company,	<u>\$54,000 00</u>
Profit and loss balance,	4,276 51
	<u>\$58,276 51</u>

WOBURN GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$9,706 17
Machinery and manufacturing appliances,	30,619 40
Street mains,	24,414 21
Meters,	2,767 86
Cash on hand,	6,720 38
Due for gas,	2,033 73
Other accounts due the Company,	309 35
Coal on hand,	196 80
Tar on hand,	62 50
Enrichers on hand,	121 92
Purifying materials on hand,	100 00
Other materials on hand,	125 00
Rented lamps,	264 50
Notes receivable,	7,500 00

Total assets, as per books of the Company, \$84,941 82

LIABILITIES.

Capital stock,	\$45,100 00
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Total liabilities, as per books of the Company,	\$45,100 00
Profit and loss balance,	39,841 82

\$84,941 82

WORCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$126,000 00
Machinery and manufacturing appliances,	183,008 79
Street mains,	220,897 85
Meters,	11,514 98
Cash on hand,	26,598 27
Due for gas,	1,030 80
Coal on hand,	6,712 13
Coke on hand,	187 50
Tar on hand,	2,100 00
Enrichers on hand,	355 00
Stoves and fixtures on hand,	25 00
Investments,	38,395 82

Total assets, as per books of the Company, \$616,826 14

LIABILITIES.

Capital stock,	\$500,000 00
Unpaid dividends,	10,485 00
Depreciation fund,	63,558 48
<hr/>	
Total liabilities, as per books of the Company,	\$574,043 48
Profit and loss balance,	42,782 66
<hr/>	
	\$616,826 14

APPENDIX B.

COMMONWEALTH OF MASSACHUSETTS.

OFFICE OF THE BOARD OF GAS COMMISSIONERS,
No. 13 BEACON STREET,
BOSTON, June 15, 1887.

To the Presidents and Directors of the several Gas Companies in the Commonwealth.

These blanks for the Annual Returns are sent in duplicate, one to be filled out, sworn to, and returned to this Board on or before *September 14, 1887*. On the other blank, a copy of the return should be made and retained by the Company for future reference. The returns are for the year ending June 30, 1887.

The returns should be made in accordance with the General Instructions regarding books and accounts, and especial attention should be given to Expenses, Income and Balance Sheet, which must be an exact transcript from the books of the Company at the close of business June 30, 1887.

Read carefully the various explanatory foot-notes.

When, from any cause, it is not possible to answer any particular question, the space designed for the answer should be filled with a dash (—) to indicate that the question has not been overlooked.

Manufacturing and other companies engaged in the manufacture of gas for sale, in connection with their other business, will estimate the value of their gas plant (when not already separated on their books) and answer all other questions fully.

Although special questions (see pages 21 and 22) have been arranged for companies making oil or water gas, those companies

are, nevertheless, expected to answer as many of the other questions as the nature of the business will admit.

Any inquiries, or other communications in relation to the returns, should be addressed to A. B. COFFIN, Chairman of the Board, at this office.

Per order of the Board of Gas Commissioners.

WALTER S. ALLEN, *Clerk.*

RETURN OF THE COMPANY TO THE BOARD
OF GAS COMMISSIONERS OF MASSACHUSETTS,
FOR THE YEAR ENDING JUNE 30, 1887.

Please give full corporate title of company,
Location of principal business office,
Names of the cities or towns supplied with gas by the company with
number of consumers' meters in each place,

LIST OF SALARIED OFFICERS.

NAME.	Official Position.	Annual Salary.

SCHEDULE A.

CAPITAL, DEBTS, COST OF PLANT JUNE 30, 1887.

CAPITAL.

- 1. Capital authorized by charter, \$
- 2. Capital authorized by votes of company,
- 3. Capital paid in :
 shares, par value, \$
 Whole number of stockholders,
 Number of stockholders resident in Massachusetts,
 Amount of stock held in Massachusetts, shares.

DEBTS.

- 4. Bonds or notes issued, viz :

Date.	When Due.	How Secured.	Rate of Interest.	Amount.

5. Total amount of bonds and notes, \$
6. Other permanent debts, if any,*
7. Capital paid in (as per item 3),
8. Total liability for capital and loans, \$

COST OF PLANT.

(As the accounts stand on the books of the Company at close of business June 30, 1887.)

9. Cost of real estate, \$
10. Cost of machinery, apparatus, and other appliances used
in the manufacture of gas,
11. Cost of street mains,
12. Cost of meters,
13. Cost and description of other permanent works, if any, .
14. Total cost of plant, as per books of the company June 30,
1887, \$
15. Amount (if any) charged to construction during the year, \$

COMPARISON OF VALUES.

16. Value of real estate, as assessed in the city or town where
located, \$
17. Value of machinery and apparatus, as assessed in the city
or town where located,
18. Value of any other property, as assessed in the city or
town where located,
19. Total value of plant, as assessed by local assessors, . . \$
Total cost, as per item 14,
20. Excess of † value, over † value, \$
- Total cost of plant, as per item 14, \$
- Amount of capital and loans, as per item 8,
21. Cost of plant ‡ than capital and loans, . . . \$

* This should not include deposits, unpaid interest, dividends, amounts due or notes given for coals or other supplies.

† This blank to be filled with the word "assessed" or "cost" as required.

‡ This blank to be filled with the word "more" or "less" as required.

SCHEDULE B.
STATEMENT OF INCOME AND EXPENSES FOR THE YEAR ENDING JUNE 30, 1887.

EXPENSES.		INCOME.	
FOR MANUFACTURE OF GAS:		FROM SALE OF GAS:	
1. Coals (other than those used for enriching) including all expenses of depositing at works,	\$	1. Supplied by meter, — feet @ \$	\$
2. Enrichers,		2. For public lamps, estimated	per M feet,
3. Purifying materials,		3. Under contracts, estimated	per M feet, .
4. Water,			
5. Wages at works,		4. Total from sale of gas,	
6. Repairs and maintenance of works (including renewal of retorts),		FROM RESIDUAL PRODUCTS:	
7. Apparatus and machinery,		5. Coke, bushels,	
Less old material sold,		6. Tar, gallons,	
.		7. Ammoniacal liquor,	
FOR DISTRIBUTION OF GAS.		8. Total from residuals,	
8. Wages of meter-takers, clerical labor in this department, and salary or commission of collectors,		9. Rent of meters,	
9. Repairs, renewals and maintenance of mains and service pipes,		10. Rent of gas stoves and engines,	
10. Repairs and renewals of meters,		11. Rent of gas lamps,	
Less old material sold,		12. Public lamps other than gas lamps,	
FOR PUBLIC LAMPS:		13.†	
11. Lighting and repairing (gas lamps only),		14.	
12. Lighting and repainting, and materials used for other lamps,		15.	
FOR OFFICE EXPENSES AND MANAGEMENT:			
13. Directors' allowances,			
14. Salaries of officers,			
15. General salaries,			
16. Rent of offices,			
17. General office expenses,			
FOR MISCELLANEOUS EXPENSES:			
18. Taxes,	\$		
Town or city,			
Corporation,			
Gas Commission and Inspector,			
19. Fire insurance,			
20. Law expenses,			
21. Claims,			
22. Bad debts,			
23. Incidental expenses,* viz.:			
a			
b			
c			
24. Total expenses,		16. Total receipts,	
25. Balance to profit and loss,			

* To include only such items of expenses attending the manufacture and sale of gas as are not already given.

† Such items of income arising only from the manufacture and sale of gas as are not included above.

SCHEDULE F.
BALANCE SHEET, JUNE 30, 1887.

From Return of 1886.	ASSETS.		From Return of 1886.	LIABILITIES.	
\$	Real estate, Machinery and manufacturing appliances, Street mains, Meters, Cash on hand, Due for gas, Other accounts due the company, Coal on hand, Coke on hand, Tar on hand, Enrichers on hand, Purifying materials on hand, Other materials on hand, Stores on hand, Fixtures on hand, Horses, wagons, etc., Office furniture, Notes receivable, Investments * (giving particulars thereof),	\$	\$	Capital stock, Bonds issued, Notes payable,†, Unpaid bills, Deposits, Unpaid dividends, Interest due but not paid, Reserved fund, Depreciation fund, Amounts due from the company, not included above,	\$
\$	Total assets, as per books of the company, Profit and Loss balance (if deficit),	\$	\$	Total liabilities, as per books of the company, Profit and Loss balance (if surplus),	\$

* Including any real estate so held.

† State whether secured by mortgage or not.

GENERAL INFORMATION.

Location of works,

Area of land occupied by the company,

Number of retorts viz. :

benches of 1 each.

benches of 2 each.

benches of 3 each.

benches of 4 each.

benches of 5 each.

benches of 6 each.

benches of 7 each.

benches of 8 each.

Number of benches rebuilt during the last year,

How long were such benches in actual use ?

Average total production of gas per retort in such benches,

Average number of retorts employed from October to March, inclusive,

Average number of retorts employed the remainder of the year,

Materials used in purifiers,

Total amount of lime used during the year, bushels.

Average cost of same per bushel, cents.

Quantity of gas purified per bushel of lime,

Cost per bushel of iron sponge purchased during the year, cents.

Estimated total cost for the year of iron sponge used, \$

Estimated quantity of gas purified by iron sponge,

Sizes of street mains, and lengths of each size in feet, viz. :

Sizes — Diameters.	Total Length June 30, 1886.	Taken up Since.	Laid Since.	Total Length June 30, 1887.
1 inch, . . .				
1½ " . . .				
1½ " . . .				
2 " . . .				
3 " . . .				
4 " . . .				
6 " . . .				
8 " . . .				
10 " . . .				
12 " . . .				
14 " . . .				
16 " . . .				
18 " . . .				
20 " . . .				
24 " . . .				
30 " . . .				
Totals, .				

Estimated capacity of works per diem,

Number of feet of gas made during the year,

“ “ “ sold by meter during the year,

“ “ “ supplied to public lamps during the year,

“ “ “ used at works and offices during the year,

“ “ “ used in the mills of the company * during the year,

“ “ “ unaccounted for during the year,

Greatest out-put in 24 hours,

Date of same,

Least out-put in 24 hours,

Date of same,

Capacity of meters and number of each size in use, viz. :

Size. No. of Lights.	Number in Use June 30, 1886.	Removed Since.	Added Since.	Number in Use June 30, 1887.
1, . . .				
2, . . .				
3, . . .				
5, . . .				
10, . . .				
20, . . .				
30, . . .				
35, . . .				
40, . . .				
45, . . .				
50, . . .				
60, . . .				
80, . . .				
100, . . .				
125, . . .				
150, . . .				
180, . . .				
200, . . .				
250, . . .				
300, . . .				
400, . . .				
500, . . .				
Totals, .				

Is any meter rent charged, and what is the rule governing such charge?

Number of gas stoves used by consumers during the year,

Number of Lungren or other high-power lamps used by consumers during the year,

Number of lamps leased by company,

Rental price of same per lamp,

Number of gas engines used by consumers during the year,

Number of gas engines leased by company,

Rental price of same,

Usual day pressure on street mains, as indicated at works,

Usual night pressure on street mains, as indicated at works,

Average candle power of the gas burning at the rate of five feet per hour.

Kind of burner used in making the test,

Gross price per 1,000 feet at the close of the year, \$

Are discounts allowed, and if so, how are they made?

* This question will only require an answer from companies engaged in other manufactures.

What changes have been made in price or discounts during the year, and when made ?

Number of public gas lamps supplied at close of year,

Price for public gas lamps,

Estimated hourly consumption of each lamp, cubic feet.

Estimated number of hours during the year that lamps are lighted,

Kind of burner principally used on public lamps,

Number of public lamps other than gas lamps maintained by the company,

Pounds of coal carbonized (not including any used as an enricher),

Kinds of coal carbonized,

Proportions of each, if used together,

Average cost of same per ton of 2,240 lbs., delivered at works, \$

Statement of coals for year ending June 30, 1887 : —

	On hand June 30, 1886.	Received during the Year.	Used during the Year.	On hand June 30, 1887.
	Tons.	Tons.	Tons.	Tons.
Enriching coals, . . .				
Other coals,				

What materials were used for enriching the gas ?

Amount of each per ton of coal carbonized,

Average cost of same delivered at the works, viz. :

Cannel coal, \$ per ton (2,240 lbs.) ; amount used, tons.

Naphtha, \$ per gallon ; amount used, galls.

\$ per ; amount used,

\$ per ; amount used,

Statement of residual products for year ending June 30, 1887 : —

	On hand June 30, 1886, Estimated.	Made during the year, Estimated.	Used during the year, Estimated.	Sold During the year.	On hand June 30, 1887, Estimated.
Coke, bushels.					
Tar, gallons.					
Ammoniacal liquor, gallons.					

Prices now obtained for residuals : —

Tar per gallon,	\$
Coke per bushel,	\$
Ammoniacal liquor per	\$

Average number of men employed, viz. : —

	Foremen.	Stokers.	Other men.
April to September, inclusive, .			
October to March, inclusive, .			

Average wages of men employed, viz. : —

Number of Men.	How Employed.	Average Wages per Month.

What additions, alterations or improvements not already stated, have been made to or in the property of the Company since the last return ?

What experiments or changes in methods of manufacture has the Company made since its last return ?

ONLY THOSE COMPANIES MAKING "WATER GAS" ARE TO ANSWER THE
QUESTIONS ON THIS PAGE.

What patent process, if any, is used in the manufacture of gas ?

How long has such process been employed ?

Is said process used alone or as an auxiliary to the making of coal gas ?

If used as an auxiliary, how often is it so used and how long each time ?

At what point in the works is the gas so made mixed with the coal gas ?

Total amount of water gas made during the year,

What kind of fuel is used for *generating the gas* ?

Amount so used,

Cost of same per ton of 2,240 lbs., delivered at works, \$

What kind of fuel is used for *generating the steam* ?

Amount so used,

Cost of same per ton of 2,240 lbs., delivered at works, \$

Number of gallons of naphtha used,

Cost per gallon, cents.

Gas produced per gallon, cubic feet.

Number of gallons of petroleum used,

Cost per gallon, cents.

Gas produced per gallon, cubic feet.

Dimensions of generator,

" superheater,

" condenser or washer,

Usual length of runs,

Capacity of works per hour as observed in actual use,

ONLY THOSE COMPANIES MAKING "OIL GAS" ARE TO ANSWER THE
QUESTIONS ON THIS PAGE.

What patent process, if any, is used in the manufacture of gas?

How long has such process been employed?

Number of gallons of naphtha used,

Average price per gallon, cents.

Number of gallons of petroleum used,

Average price per gallon, cents.

Number of gallons of other oils used,

Average price per gallon, cents.

Gas produced per gallon of naphtha, cubic feet.

" " petroleum, "

" " other oils, "

What amount of coal or other fuel was used?

Kind of coal or other fuel so used,

Cost of same per ton of 2,240 lbs., delivered at works, \$

What percentage of the gas in the holder is atmospheric air?

At what point in the works is the air mixed with the gas?

NAME AND RESIDENCE OF OFFICERS.

President,

Vice-President,

Manager,

Superintendent,

Treasurer,

Clerk of the Corporation,

NAME AND RESIDENCE OF DIRECTORS.

President.

Treasurer.

Directors.

COMMONWEALTH OF MASSACHUSETTS.

ss.

1887.

Then personally appeared

and severally made oath to the truth of the foregoing statement by them
subscribed, according to their best knowledge and belief.

Justice of the Peace.

APPENDIX C.

[Chap. 382, Acts of 1887.]

AN ACT

CONSTITUTING THE BOARD OF GAS COMMISSIONERS A
BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS.

Be it enacted, etc., as follows:

SECTION 1. The board of gas commissioners shall have the general supervision of all companies engaged in the manufacture and sale of electric light, and shall make all necessary examinations and inquiries, and keep themselves informed as to the compliance of the said companies with the provisions of law.

SECT. 2. Sections seven, nine, twelve, thirteen and fourteen of chapter three hundred and fourteen of the acts of the year eighteen hundred and eighty-five, and sections one, two and five of chapter three hundred and forty-six of the acts of the year eighteen hundred and eighty-six, are hereby extended so as to include and apply to all companies engaged in the manufacture and sale of electric light: *provided, however*, that the first return of such companies shall include the period from the first day of July in the year eighteen hundred and eighty-seven to the thirtieth day of June in the year eighteen hundred and eighty-eight inclusive.

SECT. 3. In any city or town in which a company is engaged in or organized for the purpose of the manufacture and sale of electric light no other company shall lay or erect wires over or under the streets, lanes and highways of such city or town for the purpose of carrying on its business without the consent of the mayor and aldermen of such city or selectmen of a town after a public hearing and notice to all parties interested.

SECT. 4. Section six of chapter three hundred and fourteen of the acts of the year eighteen hundred and eighty-five is hereby amended so that the expenses therein named, incurred from and after July first, eighteen hundred and eighty-seven, shall be borne by the several gas and electric light companies as therein provided.

SECT. 5. Any company or person aggrieved by the decision of the mayor and aldermen of a city or selectmen of a town under the provisions of the third section of this act may appeal therefrom to said board within thirty days from the notice of said decision, and said board shall thereupon give due notice and hear all persons in interest, and its decision thereon shall be final.

SECT. 6. In the construction of this act the terms "company" and "companies" shall be deemed to include also all corporations or individuals engaged in the business of manufacturing and selling electric light within this Commonwealth.

SECT. 7. This act shall take effect upon its passage. [*Approved June 8, 1887.*]

EXTRACT FROM CHAPTER 314, ACTS OF 1885.

SECT. 6. The annual expenses of the commissioners and clerk, including salaries, shall be borne by the several gas companies in proportion to their gross earnings, and shall be assessed and recovered in the manner provided for the assessment and recovery of the expenses of the railroad commissioners.

SECT. 7. Every gas company shall annually make a return to said board in a form and at a time prescribed by said board, setting forth the amount of its authorized capital, its indebtedness and financial condition on the first day of January preceeding, and a statement of its income and expenses during the preceeding year, together with its dividends paid or declared, and a list containing the names of all its salaried officers, and the amount of the annual salary paid to each; and said return shall be signed and sworn to by the president and treasurer of said company and a majority of its directors. Every such company shall also at all times on request furnish any statement or information required by the board concerning the condition, management and operations of the company, and shall comply with all lawful orders of said board.

SECT. 9. Upon the complaint in writing of the mayor of a city or the selectmen of a town in which a gas company is located, or of twenty customers of such company, either of the quality or price of the gas sold and delivered by such company, the board shall notify the company of such complaint by leaving at their office a copy thereof, and shall thereupon, after notice, give a public hearing to such petitioner and such company; and after said hearing may order, if they deem just and proper, any reduction in the price of gas or improvement in quality thereof; and they shall pass such orders and take such action as are necessary thereto, and a report of the proceedings and the result thereof shall be included in their annual report to the legislature.

SECT. 12. The board, whenever any such company violates or neglects in any respect to comply with the provisions of any law, or refuses or neglects to comply with any lawful order of the board, shall give notice thereof in writing to such corporation, and to the attorney-general, who shall take such proceedings thereon as he may deem expedient.

SECT. 13. Any court having jurisdiction in equity, in term time or vacation, may, on the application of said board, by any suitable process or decree in equity, enforce the provisions of this act and the lawful orders of said board.

SECT. 14. The board shall make an annual report of its doings to the legislature in January, with such suggestions as to the condition of affairs or conduct of the gas companies as may be deemed appropriate.

EXTRACT FROM CHAPTER 346, ACTS OF 1886.

SECTION 1. Every gas company shall have an office in the city or town in which its works are located, and shall keep in said office all the books and papers now required by law to be kept within the Commonwealth, and also such books as may be required to show its receipts and expenditures, and its indebtedness and financial condition; and shall, at all times, upon application, submit its books to the inspection of the board of gas commissioners.

SECT. 2. Commencing on the first day of July, in the year eighteen hundred and eighty-six, every company engaged in the manufacture and sale of gas shall keep its books and accounts in a form to be prescribed by the board of gas commissioners, and the accounts shall be closed on the thirtieth day of June in each year, so that a balance sheet of that date can be taken therefrom and included in the return required by section seven of chapter three hundred and fourteen of the acts of the year eighteen hundred and eighty-five, which return shall be for the year ending the thirtieth day of June, and shall be made to the board of gas commissioners on or before the second Wednesday of September in each year: *provided*, that the return for the current year shall include the period from the first day of July, in the year eighteen hundred and eighty-five, to the thirtieth day of June, in the year eighteen hundred and eighty-six, inclusive: *and, provided, also*, that manufacturing companies in which the manufacture of gas is a minor portion of their business shall only be required to keep accounts of the expenses and income of their gas business. The board of gas commissioners shall prepare such abstracts of the returns as it shall deem expedient, and shall transmit said abstracts, together with its annual report, to the secretary of the Commonwealth on or before the first Wednesday of January in each year, to be laid before the general court. Fifteen hundred copies of said document shall be printed for publication and distribution as one of the series of public documents.

SECT. 5. Upon the petition in writing of any person who has a residence or place of business in any city or town where a company is engaged in the manufacture and sale of gas for lighting or for fuel, and who is aggrieved by the refusal or neglect of such company to supply him with gas, the board of gas commissioners shall have authority to issue an order directing and requiring such company to supply such person with gas for either of said purposes, upon such terms and conditions as are legal and reasonable. Said board shall not issue its order under this section except after a notice to such company, directing it to appear at a time and place therein named, to show cause, if any there be, why the prayer of such petition should not be granted.

[Chap. 385, Acts of 1887.]

AN ACT

TO AUTHORIZE GAS COMPANIES TO FURNISH ELECTRIC LIGHT.

Be it enacted, etc., as follows :

SECTION 1. The board of gas commissioners, upon application in writing by any company organized or chartered under the laws of the Commonwealth for the purpose of making and selling gas for illuminating purposes, may, after such notice and hearing as said board shall deem proper, authorize said company to engage in the business of generating and furnishing electricity for light and power in all or such part of the territory in which it is authorized to supply gas as said board may designate: *provided, however*, that said company shall not engage in said business so authorized unless by vote of two-thirds of the stockholders, representing not less than two-thirds of the stock, at a meeting duly called for that purpose. Said company so authorized shall file in the office of the secretary of the Commonwealth a certificate as provided in section fifty-one of chapter one hundred and six of the Public Statutes.

SECT. 2. Said board shall at the time of granting said authority prescribe the time, not exceeding six months, within which said company shall erect and equip such a plant for generating electricity for light and power as may be required in the specified territory, and designate the minimum capacity of such plant; and if said company shall neglect to erect and complete said plant within the time prescribed, said authority shall thereupon become void, and no such authority shall be again granted to said company within two years thereafter: *provided, however*, that said board may for cause shown extend the time first prescribed for erecting and equipping said plant not more than three months from the expiration of the time first prescribed.

SECT. 3. At the expiration of the time and extension thereof, if any, given under the preceding section said board shall, after such examination as they shall deem proper, make, in a book kept by them for that purpose, a record as to whether their orders with reference to the erection and completion of said plant have been complied with. Said record shall be conclusive evidence of the truth of the matters stated therein.

SECT. 4. Said company so authorized, except in cases of the purchase or lease of the property, licenses, rights and franchises of some electric light company as authorized under section nine of this act, shall not erect or maintain any poles for the support of wires, nor erect or maintain any wires in, through or over any streets or highways, nor dig up any streets or highways for the purpose of laying said wires underground, until it has (upon petition in writing by said company) first obtained the consent in writing of the mayor and aldermen of cities or selectmen of towns in which said streets are located.

Said company, having obtained such consent, may, under the direction and control of the mayor and aldermen or selectmen, dig up and open the grounds in any streets and highways, so far as is necessary, for the purpose of laying lines of wires to carry into effect the authority given under this act, and for the purpose of keeping said lines in repair, and to erect and maintain lines of wire upon or above the surface of such streets and highways.

The said company shall put all streets and highways which are opened into as good repair as they were in when opened, and after failure so to do within a reasonable time shall be deemed guilty of a nuisance.

SECT. 5. When a party, injured in his person or property by a defect in a street or highway caused by the operations of said company in laying down, erecting, maintaining or repairing its lines of wires, or otherwise obstructing such streets or highways, recovers damages therefor of the city or town wherein such injury is received, such city or town shall, in addition to the damages so recovered against it, be entitled to recover all the taxable costs of the plaintiff and defendant in the same action in a suit brought against said company, if said company be liable for said damages, and if reasonable notice is given by such city or town to it, so that it may defend the original action.

SECT. 6. The mayor and aldermen of cities and the selectmen of towns, respectively, may regulate, restrict and control all acts and doings of said company which may in any manner affect the health, safety, convenience or property of the inhabitants of their respective cities or towns.

SECT. 7. Gas companies, as respecting the business in which by this act they are authorized to engage, shall be subject to the control of the board of gas commissioners in the same manner and to the same extent they now are or hereafter may be respecting the business of furnishing gas.

SECT. 8. Except as hereinbefore expressly provided, gas companies shall (in exercising the powers conferred by this act) have all the powers and privileges and be subject to all the duties, restrictions and liabilities set forth in all general laws which are now or hereafter may be in force relating to companies engaged in the transmission of electricity for light or power.

SECT. 9. Said gas companies so authorized by the board of gas commissioners shall have the right to purchase or to lease and to use all or any of the property, licenses, rights, privileges and franchises of any electric light company engaged in the business of furnishing electric light or power in the territory in which such gas company may be authorized to furnish such light and power.

SECT. 10. The provisions of this act shall apply to electric light and power companies.

SECT. 11. This act shall take effect upon its passage.

[Approved June 8, 1887.]

APPENDIX D.

GENERAL INSTRUCTIONS

REGARDING THE

FORM FOR THE BOOKS AND ACCOUNTS TO BE KEPT BY ELECTRIC LIGHT COMPANIES.

Books.

The general books of the company shall consist of Cash Book, Journal and Ledger. Cash transactions may be carried through the Journal or posted directly from the Cash Book into the Ledger, at the option of the bookkeeper.

Such supplementary books may be kept as shall be needed to give the information required in the annual returns.

Accounts.

The Ledger Accounts shall show: —

- The Capital Stock.
- Bonds issued.
- Notes Payable.
- Notes Receivable.
- Cost of Works.
- Dividends.
- Interest.
- Reserved Funds.
- Materials.
- Cash.
- Shop (or Jobbing) Account.
- Motors and Fixtures.
- Amounts due to and from the Company.
- Income from all Sources.
- Expenses of every class.
- Manufacturing Account.
- Profit and Loss.

Cost of Works.

This account should show, either in detail or in one "Construction Account," the cost of the company's works, including real estate, steam plant, electric plant, meters, lines, lamps and globes, as they stood on its books on the 30th day of June, 1887. Important additions to works and extensions of lines should be charged to this account.

Dividends.

All dividends as declared should be credited to this account and be charged directly to Profit and Loss Account, and as paid be charged to Dividend Account.

Interest Account.

This account should show, in detail, all interest paid or received by the company (except where interest on investments or reserved funds is credited directly to "Reserved Fund" Account as an increase thereof). The account should be closed at the end of the year by transfer of *totals* to Profit and Loss Account.

Materials.

All wire, poles, arc lamps, fittings and other supplies, except fuel, carbons, oil and waste, globes and incandescent lamps, should, when purchased, be charged to this account (which may be subdivided into several accounts if the bookkeeper prefers). When any of the materials are *used*, the value thereof should be transferred to the debit of the particular account for which the same are used, and be credited to this account. When materials, either old or new, are *sold*, the proceeds should be credited to the account to which such materials stood charged when sold.

At the close of the year an inventory should be taken of materials on hand, and the amount thereof should agree with the balance of this account (or accounts, if more than one be kept) and appear as an asset of the company.

Smaller companies purchasing supplies only as wanted for immediate use, may, if preferred, charge the cost directly to the account for which used.

Shop (or Jobbing) Account.

Companies wiring buildings, putting in or repairing fixtures, or doing other work to be paid for by customers, should charge to this account the cost of all labor and materials used, and credit it with all sums received for such work, also at the end of the year with any sums due therefor, but unpaid; the balance of the account, showing the gain or loss on such business, should be transferred to Profit and Loss Account. No labor or material used in repairs of the company's property should be charged to this account.

Motors and Fixtures.

Companies dealing in motors or electric light fixtures, or keeping the same to rent or loan, should debit this account with the cost thereof, and credit it with the proceeds of all such articles sold. At the end of the year the account should be credited with the value of all motors and fixtures on hand (those kept to rent or loan to be estimated at their worth for future use only), and this sum should be carried forward to a new account, and stand as an asset of the company.

The differences between the debit and credit amounts showing the gain or loss in the business must be transferred to Profit and Loss Account.

A separate account for each of the above may be kept if desired.

Manufacturing Account.

At the close of the year the various expense accounts should be closed by transfer to the debit of this account, which is to be credited with the several items of income arising from the manufacture and sale of electric light and power, so that the balance shall agree with that in the statement of expenses and income to be called for in the Annual Return of the Commissioners, and such balance is to be transferred to Profit and Loss Account.

Profit and Loss.

This account should show : —

Balance brought forward from previous year.

Balance of Manufacturing Account.

Interest paid.

Interest received.

Dividends declared.

Depreciation.

Other items credited and charged (in detail).

Balance carried forward to next year.

Items of income, or expenses not belonging to the operations of the current year, should be carried directly to Profit and Loss Account.

Balance Sheet.

The annual Balance Sheet required by the Commissioners must include in the item of "Unpaid Bills" all debts incurred remaining unpaid at the end of the year. Any coupons or interest due and not paid at the end of the year should also appear as a liability. The sheet must also include all income earned, but not collected, and all other sums due the company at the end of the year.

Companies which do not already keep an accurate account of materials and supplies should make a careful inventory of all on hand June 30, 1887, so that a balance sheet can be made on that date in ac-

cordance with the form required by the Commissioners, which sheet will be considered as a statement of the affairs of the company for comparison with future returns.

Income Accounts.

CONSUMERS' ACCOUNT

Should be debited (and Manufacturing Account be credited) at the end of each week, month or quarter, according as bills are rendered, with the aggregate amount of bills for electric light and power sold, and be credited, from time to time, with all sums received in settlement of such bills, so that the account shall always show the amount due for electricity supplied. When companies make a discount for prompt payment only the net rate should be entered in this account, and any excess eventually collected carried to a special account or directly to Manufacturing Account.

RENT OF MOTORS AND FIXTURES.

This account should show all sums charged for the use of motors or fixtures belonging to the company and rented to consumers, but must not include any sums charged consumers for light or power. This account will be closed at the end of the year by transfer to Manufacturing Account.

RENT OF METERS.

This account should show all sums charged for the use of meters belonging to the company and rented to consumers.

To enable companies to readily and accurately answer the questions in the form to be adopted by the Commissioners for the Annual Returns, these accounts should be kept so as to show separately the amounts received from : —

- Commercial Arc Lights.
- Commercial Incandescent Lights.
- Public Arc Lights.
- Public Incandescent Lights.
- Electric Motors.
- Rent of Motors.

Other receipts not derived from the electric light and power business should be credited to Profit and Loss Account, and not allowed to increase the receipts of the electric department.

Dividends on investments and reserved funds should also go to the credit of Profit and Loss Account except when credited directly to Reserved Funds as an increase thereof.

Companies engaged in other business should keep the receipts and expenses of the same separate and distinct from the electric light and power business, and carry the gain or loss directly to Profit and Loss Account.

Expense Accounts.

In order to correctly report the various items of expenses which will be called for in the Annual Return they should be separated into the following accounts, viz. : —

1. Fuel.
2. Carbons.
3. Oil and Waste.
4. Incandescent Lamps.
5. Globes.
6. Water.
7. Wages.
8. Repairs of Steam Plant.
9. Repairs of Electric Plant.
10. Repairs of Lines, Motors and Lamps.
11. Apparatus and Machinery.
12. Directors' Allowances.
13. Salaries of Officers.
14. General Salaries.
15. Rent of Offices.
16. General Office Expenses.
17. Taxes.
18. Insurance.
19. Law Expenses.
20. Claims.
21. Bad Debts.
22. Incidental Expenses.

The several expense accounts must be closed at the end of the year by transfer to debit of Manufacturing Account.

Expense Accounts are to be kept as follows, viz. : —

1. FUEL :

This account must be debited at the beginning of the year with the value of fuel on hand, and after that with the cost of all purchased, including freight, and all other expenses incurred in the delivery of the same. At the close of the year the account must be credited with the value of the fuel on hand so that the balance will represent the actual cost of fuel used.

2. CARBONS :

This account must be debited at the beginning of the year with the value of all carbons on hand, and after that with the cost delivered at the station of all purchased, and be credited at the end of the year with the value of all on hand, so that the balance will represent the actual cost of carbons *used* during the year.

3. OIL AND WASTE.

4. INCANDESCENT LAMPS.

5. GLOBES:

These accounts must be opened and kept in the manner prescribed for "Fuel" and "Carbons."

6. WATER:

To show the cost of water used during the year.

7. WAGES:

This account should include all wages paid for labor in the ordinary operation of the business, including electrician at station, but not labor for repairs nor salaries of officers of the company.

8. STEAM PLANT REPAIRS:

To include all expenditures for materials and labor in the general repairs and maintenance of the steam plant.

9. ELECTRIC PLANT REPAIRS:

To include all expenditures for materials and labor in the general repairs and maintenance of the electric plant.

10. REPAIRS OF LINES, METERS, LAMPS AND MOTORS:

This account should include all expenditures for materials and labor in the repairs of lines, meters, lamps and motors (except the cost of globes and incandescent lamps). All expenses of rearranging circuits, replacing old lines and arc lamps with new, etc., should be charged to this account.

11. APPARATUS AND MACHINERY:

To include cost of all apparatus and machinery purchased or built during the year, not included in repairs of works, nor charged to Construction Accounts.

12. DIRECTOR'S ALLOWANCES:

To include any allowance for special services, or attending meetings, but not salaries.

13. SALARIES OF OFFICERS:

To include salaries of President, Treasurer, Clerk and any other officers of the corporation.

14. GENERAL SALARIES:

To include salaries of General Superintendent, or Manager, and of Clerks and Messengers not included in other accounts.

15. RENT OF OFFICES.

16. GENERAL OFFICE EXPENSES :

To include printing, postages, stationery and all other items of office expense not charged elsewhere.

17. TAXES :

To include all local and State taxes.

18. INSURANCE :

To include fire insurance on buildings, machinery, coal and other property, also boiler insurance.

19. LAW EXPENSES.

20. CLAIMS :

To include all sums paid in settlement of suits or claims against the company for injuries to persons or property.

21. BAD DEBTS :

To include only overdue bills not likely to be paid, but not to include any sum as an *estimate* of what may prove bad in the future.

22. INCIDENTAL EXPENSES :

To include only such items as cannot be readily apportioned to other accounts.

Gas Companies furnishing electric light and power should keep the following accounts relating thereto separate, viz.: Cost of Works, Electric Light Jobbing Account, Electric Light Manufacturing Account, Income Accounts described above, and the Expense Accounts numbered from 1 to 11 (inclusive). The other Expense Accounts should be divided as accurately as possible, and the portions belonging to the Electric Department should be debited to Electric Light Manufacturing Account.

Adopted by the Board of Gas Commissioners.

WALTER S. ALLEN,
Clerk.

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FOURTH ANNUAL REPORT
OF
THE BOARD
OF
GAS COMMISSIONERS
OF THE
Commonwealth of Massachusetts.

JANUARY, 1889.

BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.
1889.

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Commonwealth of Massachusetts.

The Board of Gas Commissioners respectfully submits its Fourth Annual Report.

There are at the present time seventy-one gas companies and seventy-eight electric light companies under the supervision of the Board.

The officers of the various companies have, as a rule, shown a commendable purpose to make the annual returns as complete as possible. The returns have been presented by the gas companies with much more promptness than in former years. In two instances, however, it was found necessary to invoke the aid of the Attorney-General in procuring them.

The gas companies have now had the experience of several years in preparing them, so that great accuracy and early filing of the returns can reasonably be expected from those companies hereafter.

The electric light companies, owing to the recent organization of many of them, and to the novelty and lack of precedent in the business of electric lighting, have not been able in all cases to make the returns as perfect as they wished; and the delay on their part, which for the same reasons has been excusable, has nevertheless somewhat retarded the Board in its tabulations and preparation of its annual report. The difficulties will doubtless be speedily overcome.

To avoid multiplying returns, it is suggested that both gas companies and electric light companies can properly be included with the companies excepted in chapter 225 of the Acts of 1887.

GAS COMPANIES.

During the year two gas companies have been incorporated under the general law : the Agawam Gas Company, West Springfield, February 28, with a capital stock of \$50,000 ; and the Lenox Gas and Electric Company, November 24, with a capital stock of \$30,000.

The Vineyard Haven Gas and Electric Company was chartered by special act, chapter 117, Acts of 1888.

The Lynn Gas Light Company and Lynn Electric Lighting Company have formed a consolidation, with the approval of the Board, under chapter 252, Acts of 1888.

No application for approval of increase of capital stock, under chapter 427, Acts of 1888, has as yet been made by the Bay State Gas Company.

In the month of December the Cottage City Gas Company filed its petition for proceedings under the insolvency laws.

WATER GAS.

Seven gas companies have applied for licenses to make and sell water gas, under chapter 428 of the Acts of last year, which is printed in the Appendix ; namely, the Amesbury and Salisbury Gas Company, the Brockton Gas Light Company, the Cottage City Gas Company, the Miller's River Gas Light Company, the Roxbury Gas Light Company, the South Boston Gas Light Company, and the Spencer Gas Light Company. All the cases were assigned for hearing on the same day. The petitioners and remonstrants were represented by counsel. Since the second hearing, the cases have been postponed from month to month, at the request of all the parties, or on motion of the petitioners and with the consent of the remonstrants.

The various parties in interest, remonstrants as well as petitioners, expressed the desire and request that the Commissioners might visit other cities where water gas was in use. Accordingly, pending the adjournment of the hearing, all the members of the Board have been to New York, Brooklyn, Albany, Rochester, Chicago and St. Louis. Visits for the purpose of inspection and inquiry have also been made by one or more members of the Board to Kansas City, Topeka,

Omaha, St. Paul, Minneapolis, Milwaukee, Toronto; and to Trenton, New Brunswick, Newark, Jersey City and Hoboken, in New Jersey; and New Haven and Putnam, Connecticut.

It has been and is the purpose of the Board, impartially to gather as much information as possible from any and all sources, in the comparison of coal gas and water gas. This has been done so far by inspection of gas works, interviews with leading gas engineers, inquiries of the health officers of the various cities, and examination into the details of accidents caused by the two gases.

While this work is still in progress, before the petitioners have completed their side of the case, or the remonstrants even been heard, it would be manifestly unjust to form ultimate opinions, and wholly improper to attempt to indicate at the present time what the final conclusions may be.

There is, however, a phase of the cases which the Board believes should be stated to the Legislature. At the first hearing, each of the counsel present was invited to give his interpretation of the meaning of the Statute under which the petitioners were asking for licenses, in reply to the queries: Can conditions or terms of any sort be imposed in the license, if one be granted? Can a license be made revocable, or issued for a certain period of time? The Act requires the Board, if it grant a license, to certify in it that the gas "can be used with safety." Can these words be qualified in any way, for instance, by a provision requiring care in its use? Must the conclusion be reached that water gas is as safe as coal gas, before a license can be granted? Again, if it is shown or admitted that both gases are dangerous, can the certificate rightfully be made?

These questions received various answers from the able counsel, and the Commissioners are in doubt as to the true interpretation of the Act. Moreover, they believe, and beg leave to suggest, that it is impolitic and harmful to convey the impression that either coal gas or water gas is not dangerous. It is known that a mixture of either gas with air forms a terrific explosive; and either, if breathed long enough, will cause death.

Accidents from gas arise usually from ignorance or carelessness. Is it not better that the community be warned of the danger, rather

than misled into a feeling of safety which might even lessen the degree of care now shown in the use of coal gas?

In order that the Board may be enabled to grant a license for making water gas, if, upon the final consideration of the matter, it shall deem it prudent so to do, it respectfully recommends that the Act be modified by striking out the portion requiring a certificate as to safety, and by expressly allowing the Board the power to insert in the license such terms and conditions as it shall deem prudent; and, at any time after due notice to a company, to revoke or change the license.

The following table shows the corporate name, the localities supplied, the capital and the par value of the shares of the companies in active operation on the thirtieth day of June last:—

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Adams Gas Light Co.,	Adams,	\$17,300	\$25
Amesbury & Salisbury Gas Co., .	Amesbury,	60,000	100
Amherst Gas Co.,	Amherst,	10,000	100
Arlington Gas Light Co., . . .	Arlington,	70,000	100
	Belmont,	—	—
	Winchester,	—	—
Attleborough Gas Light Co., . .	Attleborough,	23,200	100
Beverly Gas Light Co.,	Beverly,	40,000	100
Boston Gas Light Co.,	Boston (city proper),	2,500,000	500
Brockton Gas Light Co.,	Brockton,	64,000	100
Brookline Gas Light Co.,	Brookline,	450,000	100
	Boston (Brighton District),	—	—
Cambridge Gas Light Co.,	Cambridge,	700,000	100
	Somerville (in part),	—	—
Charlestown Gas Co.,	Charlestown,	500,000	50
	Somerville (in part),	—	—
	Medford (in part),	—	—
Chelsea Gas Light Co.,	Chelsea,	300,000	100
Chicopee Gas Works,	Chicopee Centre,	30,000	—
Citizens' Steam & Gas Light Co. of Lynn, ¹	Lynn,	125,000	100
Citizens' Gas Light Co. of Quincy,	Quincy,	33,000	100
Citizens' Gas Light Co. of South Reading,	Wakefield,	95,300	100
	Reading,	—	—
	Stoneham,	—	—
Clinton Gas Light Co.,	Clinton,	35,000	500
Cottage City Gas Co.,	Cottage City,	60,000	100
Danvers Gas Light Co.,	Danvers,	20,000	50

¹ This company manufactures fuel water gas.

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Dedham & Hyde Park Gas & Electric Light Co.,	Dedham,	\$100,000	\$50
	Hyde Park,	—	—
Dorchester Gas Light Co.,	Boston (Dorchester District),	400,000	100
	Milton,	—	—
East Boston Gas Co.,	Boston (E. Boston),	220,000	25
Easthampton Gas Co.,	Easthampton,	30,000	100
Fall River Gas Works Co.,	Fall River (in part),	288,000	100
Fitchburg Gas Co.,	Fitchburg,	60,000	50
Gardner Gas Light Co.,	Gardner,	30,000	100
Gloucester Gas Light Co.,	Gloucester,	62,300	50
Great Barrington Gas Light Co.,	Great Barrington,	5,000	100
Greenfield Gas Light Co.,	Greenfield,	50,000	50
Haverhill Gas Light Co.,	Haverhill,	75,000	50
	Bradford,	—	—
Ipswich Gas Light Co.,	Ipswich,	16,000	100
Jamaica Plain Gas Light Co.,	Boston (Ward 23),	200,000	100
Lawrence Gas Co.,	Lawrence,	425,000	100
	Methuen,	—	—
Leominster Gas Light Co.,	Leominster,	50,000	100
Lexington Gas Light Co.,	Lexington,	20,000	100
Lowell Gas Light Co.,	Lowell,	500,000	100
	Dracut,	—	—
	Tewksbury,	—	—
Lynn Gas & Electric Co.,	Lynn,	300,000	100
	Swampscott,	—	—
Malden & Melrose Gas Light Co.,	Malden,	170,000	100
	Melrose,	—	—
	Medford (in part),	—	—
	Everett,	—	—
Manufacturers' Gas Light Co.,	Fall River (in part),	50,000	100
Marblehead Gas & Electric Light Co.,	Marblehead,	40,000	100
Marlborough Gas Light Co.,	Marlborough,	50,000	100
Milford Gas Light Co.,	Milford,	72,300	100
	Hopedale,	—	—
Miller's River Gas Light Co.,	Athol,	40,000	100
Mutual Gas Light Co. of Southbridge,	Southbridge,	15,000	50
Nantucket Gas Light Co.,	Nantucket,	36,000	100
Natick Gas Light Co.,	Natick,	20,000	100
New Bedford Gas Light Co.,	New Bedford,	250,000	100
Newburyport Gas Co.,	Newburyport,	80,000	100
Newton & Watertown Gas Light Co.,	Newton,	200,000	100
	Watertown,	—	—
	Wellesley,	—	—
	Weston,	—	—
North Adams Gas Light Co.,	North Adams,	50,000	100
Northampton Gas Light Co.,	Northampton,	50,000	25
North Attleborough Gas Light Co.,	No. Attleborough,	68,100	100
	Attleborough Falls,	—	—
	Wrentham,	—	—

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value
Norwood Gas Light Co., . . .	Norwood,	\$12,000	\$100
Pittsfield Coal Gas Co., . . .	Pittsfield,	62,500	100
Plymouth Gas Light Co., . . .	Plymouth,	40,000	100
Roxbury Gas Light Co., . . .	Boston (Roxbury District),	600,000	100
Salem Gas Light Co.,	Salem,	300,000	100
South Boston Gas Light Co., . . .	Peabody,	—	—
	Boston (South Boston),	440,000	100
Spencer Gas Co.,	Spencer,	85,000	100
Springfield Gas Light Co., . . .	Springfield,	500,000	100
Taunton Gas Light Co.,	Taunton,	80,000	50
Waltham Gas Light Co.,	Waltham,	140,000	100
Westfield Gas Light Co.,	Westfield,	54,000	100
Woburn Gas Light Co.,	Woburn,	45,100	100
Worcester Gas Light Co.,	Worcester,	500,000	100

The company at Fitchburg furnishes water, that at Gloucester maintains a wharf and supplies water, and that at Springfield furnishes steam for heating. In addition to these, the companies in Beverly, Brookline, Charlestown, Chelsea, Clinton, Cottage City, Holyoke, Lawrence, New Bedford, Spencer, Waltham and Westfield, furnish electric light. In all these cases, the capital employed in such operations is not separated from that invested in the gas business, and the capital as given is the total capital of the companies.

The following table shows the names of the owners of gas works not owned by gas companies, the localities supplied and the estimated value of the plant:—

Chicopee Manufacturing Co., . . .	Chicopee Falls, . . .	\$15,000 00
Holyoke Water Power Co.,	Holyoke,	100,000 00
A. H. Wray,	Lee,	10,000 00
W. B. Hammond,	Middleborough, . . .	26,275 00
Otis Co.,	Ware,	10,000 00
Stevens Linen Works,	Webster,	18,000 00
	Dudley.	

The following companies have bonds and notes outstanding:—

Amherst,	\$1,500 00
Attleborough,	14,000 00
Beverly (special stock),	11,800 00
Brockton,	35,000 00

Brookline,	\$70,000 00
Citizens' (Lynn),	125,000 00
Citizens' (Quincy),	13,000 00
Clinton,	15,000 00
Cottage City,	21,240 00
Danvers,	2,500 00
Dedham,	9,000 00
Gardner,	13,355 00
Greenfield,	500 00
Haverhill,	40,000 00
Ipswich,	8,100 00
Jamaica Plain,	40,000 00
Lawrence,	56,000 00
Lexington,	2,770 00
Malden,	50,800 00
Marblehead,	2,000 00
Millers' River,	20,000 00
Natick,	9,500 00
New Bedford,	120,000 00
North Adams,	8,000 00
North Attleborough,	68,100 00
South Boston,	10,000 00
Spencer,	75,000 00
Springfield,	68,000 00
Waltham,	28,000 00
Westfield,	16,000 00
Worcester,	25,000 00

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value of the stock held within the Commonwealth:—

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at par of Stock held in Massachusetts.
Adams,	8	8	\$17,300
Amesbury,	14	7	30,300
Amherst,	21	21	10,000
Arlington,	61	42	46,900
Attleborough,	21	19	22,800
Bay State (Boston),	9	5	7,200
Beverly,	29	29	40,000
Boston,	685	614	2,323,500
Brockton,	51	49	63,300
Brookline,	138	128	410,800
Cambridge,	389	346	624,200
Charlestown,	245	227	465,900
Chelsea,	126	121	295,600

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at par of Stock held in Massachusetts.
Chicopee,	2	2	\$30,000
Citizens' (Lynn),	8	2	200
Citizens' (Quincy),	48	47	32,500
Citizens' (Wakefield),	65	59	90,900
Clinton,	17	17	35,000
Cottage City,	23	19	40,700
Danvers,	37	37	20,000
Dedham,	39	34	89,250
Dorchester,	192	180	366,400
East Boston,	128	101	194,750
Easthampton,	38	32	26,300
Fall River,	10	7	13,200
Fitchburg,	31	29	54,150
Gardner,	12	12	30,000
Gloucester,	62	59	61,350
Great Barrington,	9	9	5,000
Greenfield,	34	24	43,700
Haverhill,	62	55	64,000
Ipswich,	28	28	16,000
Jamaica Plain,	138	129	190,200
Lawrence,	182	165	375,800
Leominster,	58	55	49,200
Lexington,	25	24	19,900
Lowell,	262	222	446,100
Lynn,	157	149	291,200
Malden,	145	125	139,200
Manufacturers' (Fall River),	7	7	50,000
Marblehead,	29	23	32,500
Marlborough,	12	12	50,000
Milford,	49	48	68,700
Miller's River (Athol),	9	9	40,000
Mutual (Southbridge),	29	27	13,300
Nantucket,	57	53	34,700
Natick,	40	40	20,000
New Bedford,	197	170	235,000
Newburyport,	65	52	68,300
Newton,	179	167	186,700
North Adams,	42	30	44,800
Northampton,	40	29	30,025
North Attleborough,	37	34	67,400
Norwood,	10	9	10,100
Pittsfield,	50	40	56,700
Plymouth,	30	23	30,700
Roxbury,	18	15	594,000
Salem,	252	235	282,500
South Boston,	31	27	438,500
Spencer,	20	20	85,000
Springfield,	98	91	474,900
Taunton,	100	96	76,100
Waltham,	111	105	131,000
Westfield,	23	20	47,700
Woburn,	49	47	43,400
Worcester,	182	172	462,400

The following statistics exhibit the aggregate receipts and expenses of all the companies in the State, compiled from the items relating to the manufacture and sale of gas in the last two returns made to the Board:—

	FOR YEAR ENDING JUNE 30.	
	1887.	1888.
RECEIPTS:—		
For gas sold by meter,	\$3,789,643 30	\$3,900,416 07
For gas supplied to public lamps,	421,430 65	396,876 29
From sales of coke,	290,692 31	360,434 83
“ “ tar,	66,880 66	81,646 59
“ “ ammoniacal liquor,	23,370 82	24,060 09
“ rent of meters,	1,210 36	768 18
“ “ gas stoves and engines,	1,602 95	1,449 88
“ “ gas lamps,	470 57	1,921 15
“ public lamps other than gas lamps, . .	8,945 05	9,496 81
“ other sources,	592 41	120 12
Total,	\$4,604,838 08	\$4,777,190 01
EXPENSES:—		
1. Coals,	\$1,148,718 10	\$1,254,694 21
2. Enrichers,	128,323 35	133,559 06
3. Purifying materials,	38,195 89	44,420 95
4. Water,	21,865 77	25,535 53
5. Wages at works,	593,100 55	643,727 12
6. Repairs and maintenance of works (including renewal of retorts),	222,759 07	255,144 43
7. Apparatus and machinery,	4,821 84	14,752 25
8. Wages of meter takers, clerical labor in distribution and salary or com- mission of collectors,	95,943 92	101,307 91
9. Repairs, renewals and maintenance of mains and service pipes,	104,279 74	112,363 78
10. Repairs and renewals of meters,	47,877 56	59,407 66
11. Lighting and repairing (gas lamps only),	18,079 71	14,340 12
12. Lighting and repairing and materials used for other lamps,	7,117 61	8,405 31
13. Directors' allowances,	2,377 35	3,234 50
14. Salaries of officers,	94,497 43	119,667 66
15. General salaries,	111,101 36	98,445 09
16. Rent of offices,	9,656 93	11,028 59
17. General office expenses,	30,956 99	41,137 03
18. Taxes,	230,580 13	266,357 70
19. Fire insurance,	3,881 29	6,398 33
20. Law expenses,	21,469 52	27,504 81
21. Claims,	9,843 52	10,365 50
22. Bad debts,	21,921 14	18,857 98
23. Incidental expenses,	63,855 39	57,255 12
Total,	\$3,031,224 16	\$3,327,910 64

	FOR YEAR ENDING JUNE 30.	
	1887.	1888.
Leaving an apparent net profit on their gas business of	\$1,573,613 92	\$1,449,279 37
They have also received for interest,	31,809 72	23,141 52
“ “ “ for rents, etc.,	41,126 66	50,513 11
“ “ “ from electric lighting,	—	23,089 32
Making a total,	\$1,646,550 30	\$1,546,023 32
From these receipts were paid interest on bonds and loans,	\$25,959 23	\$44,340 02
Dividends,	996,577 00	941,481 00
Other items,	13,025 82	13,020 10
Leaving a surplus for the year of	\$1,035,562 05 610,998 25	\$998,841 12 547,182 20

Five of the companies appear not to have earned expenses, nine others have not earned sufficient to warrant the declaring of any dividend on their capital, and four others have paid a part of their dividends from the surplus of former years. Of the five companies not earning expenses, two show sufficient profit from electric lighting to leave a small surplus for the year. The Greenfield Gas Light Company has paid a dividend of five per cent., which amounted to about \$800 more than the net earnings and surplus of the company.

The receipts for gas sold by meter, notwithstanding a reduction in average price, show a gain this year of about \$111,000: while those from street lights fall off about \$25,000, or six per cent., which would seem to show that the increase of electric lighting, while affecting the gas companies' street lighting, has not as yet reduced the receipts from sales through meters.

In the Appendix will be found, under date of June 30, 1888, the separate balance sheet of the companies, as taken from the annual returns, with corrections made by the Board after examination and correspondence with the officers of the several companies.

Aggregates from these balance sheets and those in the returns of 1887 show the following facts: —

	YEAR ENDING JUNE 30.	
	1887.	1888.
ASSETS: —		
Real estate, machinery, street mains and meters,	\$12,497,087 93	\$13,662,855 25
Cash on hand,	604,845 51	632,129 77
Due for gas,	413,317 21	449,617 47
Other accounts due,	59,877 21	64,225 52
Materials, etc.,	590,571 12	623,092 85
Notes receivable,	371,607 71	282,928 05
Investments,	366,217 37	303,626 95
Electric plants,	—	341,174 37
	¹ \$14,903,524 06	\$16,359,650 23
LIABILITIES: —		
Capital stock,	\$11,635,350 00	\$12,384,100 00
Bonds,	288,662 00	300,262 00
Notes payable,	204,133 18	554,856 52
Unpaid bills,	95,413 76	119,936 50
Unpaid dividends,	59,253 50	34,914 50
Deposits,	23,483 32	22,687 51
Interest due and unpaid,	1,521 83	6,538 82
Other items,	41,852 07	48,008 89
	\$12,439,049 66	\$13,471,304 74
Reserved and depreciation funds,	691,446 36	628,804 46
	\$13,131,116 02	\$14,100,109 20
Surplus,	1,772,408 04	2,259,541 03
	¹ \$14,903,524 06	\$16,359,650 23

Of these companies —

56 ² show an aggregate surplus of	\$1,868,334 78	\$2,356,956 89
8 show an aggregate deficit of	95,926 74	97,415 86
Leaving total net surplus, as shown above,	\$1,772,408 04	\$2,259,541 03
Which, added to reserves carried as liabilities,	691,446 36	628,804 46
Would show an actual surplus of	\$2,474,954 40	\$2,888,345 49
Equivalent to per cent. on capital of about	21	23

¹ Not including the Bay State Company of Boston, which was not in operation on June 30, 1887.

² Fifty-three companies, June 30, 1887.

The following table shows the valuation of the property of each company, as assessed by the local assessors : —

Name of Company.	Assessed Value.	Name of Company.	Assessed Value.
Adams,	\$12,900	Lexington,	\$1,500
Amesbury,	22,500	Lowell,	1,110,570
Amherst,	10,000	Lynn,	114,750
Arlington,	35,150	Malden,	120,700
Attleborough,	15,600	Manufacturers' (Fall	
Bay State,	202,000	River),	43,847
Beverly,	16,550	Marblehead,	13,800
Boston,	4,269,100	Marlborough,	10,700
Brockton,	45,900	Middleborough,	1
Brookline,	352,700	Milford,	76,638
Cambridge,	651,200	Miller's River (Athol),	10,000
Charlestown,	560,700	Mutual (Southbridge),	7,700
Chelsea,	271,400	Nantucket,	6,000
Chicopee,	32,000	Natick,	12,200
Chicopee Falls,	10,000	New Bedford,	326,000
Citizens' (Lynn),	20,000	Newburyport,	40,200
Citizens' (Quincy),	13,300	Newton,	270,280
Citizens' (Wakefield),	22,000	North Adams,	12,500
Clinton,	31,200	Northampton,	51,800
Cottage City,	7,400	North Attleborough,	53,300
Danvers,	3,950	Norwood,	11,000
Dedham,	35,000	Pittsfield,	64,500
Dorchester,	298,200	Plymouth,	14,250
East Boston,	81,400	Roxbury,	602,900
Easthampton,	29,500	Salem,	299,500
Fall River,	179,500	South Boston,	390,500
Fitchburg,	61,500	Spencer,	30,600
Gardner,	4,000	Springfield,	532,770
Gloucester,	58,500	Taunton,	64,400
Great Barrington,	1,000	Waltham,	164,500
Greenfield,	26,000	Ware,	10,850
Haverhill,	122,500	Webster,	8,450
Holyoke,	100,000	Westfield,	45,850
Ipswich,	5,400	Woburn,	45,100
Jamaica Plain,	175,700	Worcester,	604,600
Lawrence,	395,000		
Lee,	3,100	Total,	\$13,395,205
Leominster,	23,000		

¹ Not returned.

If the company which does not return its taxable value be included in the total at the value of its last return (\$5,800), the total valuation would be \$13,698,005 ; or, omitting Gardner as not in last year's list, an increase of \$384,647 over last year's valuation.

The following table shows the amount paid by each company for taxes, and the amount for each thousand feet of gas sold:—

NAME OF COMPANY.	Amount of Taxes paid.	Amount per Thousand sold.
Adams,	\$456 71	\$0 0770
Amesbury,	335 13	.0873
Amherst,	162 58	.2110
Arlington,	954 13	.1601
Attleborough,	384 63	.0661
Beverly,	244 19	.0495
Boston,	71,402 20	.0630
Brockton,	1,337 56	.1045
Brookline,	4,000 47	.0881
Cambridge,	19,429 67	.1800
Charlestown,	10,649 83	.1454
Chelsea,	5,896 43	.1219
Chicopee,	631 45	.0790
Chicopee Falls,	1	1
Citizens' (Lynn),	384 24	.0581
Citizens' (Quincy),	298 42	.0587
Citizens' (Wakefield),	550 38	.1357
Clinton,	639 26	.1000
Cottage City,	1	1
Danvers,	86 76	.0779
Dedham,	787 37	.1316
Dorchester,	6,154 84	.1208
East Boston,	5,445 65	.1641
Easthampton,	546 31	.1749
Fall River,	6,572 22	.1508
Fitchburg,	1,324 50	.0880
Gloucester,	1,371 43	.1251
Great Barrington,	22 64	.0475
Greenfield,	722 43	.2466
Haverhill,	2,203 55	.0531
Holyoke,	2,124 03	.0520
Ipswich,	86 98	.0819
Jamaica Plain,	4,126 26	.1502
Lawrence,	10,725 01	.1492
Lee,	41 03	.1738
Leominster,	535 02	.3012
Lexington,	69 55	.0941
Lowell,	18,322 52	.0997
Lynn,	5,185 59	.1071
Malden,	2,829 88	.1011
Manufacturers' (Fall River),	963 58	.0832
Marblehead,	631 98	.1796
Marlborough,	632 76	.1616
Middleborough,	113 50	.1287
Milford,	1,217 23	.1429
Miller's River (Athol),	146 52	.0574
Mutual (Southbridge),	260 61	.2069

¹ No tax returned.

NAME OF COMPANY.	Amount of Taxes paid.	Amount per Thousand sold.
Nantucket,	\$155 55	\$0.0751
Natick,	363 37	.1132
New Bedford,	5,197 30	.1195
Newburyport,	1,183 81	.1263
Newton,	4,344 08	.1080
North Adams,	569 12	.0390
Northampton,	753 47	.0797
North Attleborough,	1,350 10	.1246
Norwood,	211 43	.1636
Pittsfield,	1,541 54	.1256
Plymouth,	325 84	.0873
Roxbury,	17,033 38	.1163
Salem,	5,608 40	.1481
South Boston,	6,754 25	.1155
Spencer,	780 58	.0678
Springfield,	8,374 00	.1211
Taunton,	1,660 59	.0528
Waltham,	2,507 71	.0896
Ware,	182 46	.0402
Webster,	166 00	.1084
Westfield,	870 98	.1541
Woburn,	1,000 38	.1426
Worcester,	14,416 33	.1572
Total,	\$266,357 70	-

The total sum paid by the companies for taxes, including State inspection, was \$266,357.70, an average of $10\frac{59}{100}$ cents per thousand feet sold; being an increase over the previous year, in the total amount, of \$35,648.78, and of $\frac{53}{100}$ of a cent per thousand feet of gas sold.

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table: —

NAME OF COMPANY.	Rate per Cent.	Amount of Dividends.	Amount per Thousand sold.
Adams,	20	¹ \$3,460	\$0.5837
Amesbury,	—	² —	—
Amherst,	8	800	1.0381
Arlington,	6	4,200	.7444
Attleborough,	18	4,176	.7173
Beverly, { ordinary stock,	—	² —	—
{ special stock,	6	708	.1479
Boston,	10	250,000	.2205
Brockton,	7	4,480	.3512
Brookline,	6	24,000	.5284
Cambridge,	10	70,000	.6633
Charlestown,	10	50,000	.6797
Chelsea,	6	18,000	.5853
Chicopee,	15	4,500	.5620
Citizens' (Lynn),	—	² —	—
Citizens' (Quincy),	4	1,320	.2598
Citizens' (Wakefield),	3	2,859	.7049
Clinton,	6	2,100	.3285
Cottage City,	—	² —	—
Danvers,	—	² —	—
Dedham,	3	3,000	.5016
Dorchester,	6	24,000	.4817
East Boston,	8	17,600	.5303
Easthampton,	10	3,000	.9607
Fall River,	3	8,640	.1983
Fitchburg,	15	9,000	.5977
Gloucester,	8	³ 4,984	.4548
Great Barrington,	—	² —	—
Greenfield,	5	2,520	.8602
Haverhill,	10	7,500	.1808
Ipswich,	—	² —	—
Jamaica Plain,	8	16,000	.5826
Lawrence,	8	33,000	.4591
Leominster,	5	2,500	1.4076
Lexington,	—	² —	—
Lowell,	12	60,000	.3267
Lynn,	6	18,000	.3718
Malden,	6	10,200	.3644
Manufacturers' (Fall River),	10	5,000	.4315
Marblehead,	6	2,400	.6819
Marlborough,	—	² —	—

¹ In addition to the dividend, a rebate is allowed to mills owning stock on the gas used by them.

² No dividend declared.

³ An additional dividend of four per cent. was declared from earnings of wharf property.

NAME OF COMPANY.	Rate per Cent.	Amount of Dividends.	Amount per Thousand sold.
Milford,	8	\$5,784	\$0.6790
Miller's River (Athol),	—	1 —	—
Mutual (Southbridge),	7	1,050	.8334
Nantucket,	4	1,440	.6968
Natick,	8	1,600	.4984
New Bedford,	10	23,500	.4290
Newburyport,	8	6,400	.6828
Newton,	8	16,000	.3978
North Adams,	8	4,000	.2740
Northampton,	8	4,000	.4232
North Attleborough,	8	5,448	.5028
Norwood,	—	1 —	—
Pittsfield,	16	10,000	.8108
Plymouth,	6½	2,600	.6963
Roxbury,	10	60,000	.4097
Salem,	6	18,000	.4752
South Boston,	4	17,600	.3010
Spencer,	—	1 —	—
Springfield,	8	40,000	.5783
Taunton,	10	8,000	.2544
Waltham,	6	8,400	.3003
Westfield,	8	4,320	.7644
Woburn,	8	3,608	.5143
Worcester,	6	30,000	.3271
Total,		\$939,697	

¹ No dividend declared.

PRICE OF GAS.

Between June 30, 1887, and June 30, 1888, the following companies have made reductions in the price of gas : —

Amesbury,
Boston,
Chelsea,
Chicopee,
Citizens' (Quincy),
Citizens' (Wakefield),
Dedham,
Gloucester,
Greenfield,
Haverhill,
Holyoke,
Jamaica Plain,
Lowell,

Malden,
Marblehead,
Marlborough,
Middleborough,
Newburyport,
Newton,
Northampton,
North Adams,
Pittsfield,
South Boston,
Springfield,
Ware,
Webster,
Worcester.

Of these companies, nine made reductions in the price of gas in 1887, eleven in 1886, and two made reductions in both years.

The following pages show the price charged by the several companies, June 30, 1888; the average candle-power, as shown by the tests made by the State Inspector of Gas; and the average price per thousand feet sold by meter, received in the two years ending June 30, 1888.

The gas made is coal gas, except where otherwise noted.

NAME OF COMPANY.	Average Candle- Power.	Gross Price.	REMARKS.	Average Price, 1886-87.		Average Price, 1887-88.	
Adams,	16.73	\$3 00	20 per cent. discount if paid within 5 days from date of bill,	\$2 40		\$2 39	
Amesbury,	21.40	2 75	25 cents per M if paid within 10 days after bill is presented.	3 25		2 02	
Amherst,	39.90	6 00	Discounts: If bill amounts to \$5 per month, 5 per cent.; to \$10, 10 per cent.; to \$20, 15 per cent.; to \$50, 20 per cent.; to \$75, 25 per cent. Oil gas, with 5 to 8 per cent. of air.	5 36		5 30	
Arlington,	16.07	3 00	. . . . .	3 00		2 68	
Atleborough,	16.97	2 25	. . . . .	2 25		2 25	
Beverly,	16.23	3 00	Discount 10 per cent. on 1,000 feet, 20 per cent. on 10,000 feet, burned through one meter during the quarter.	2 61		2 57	
Boston,	18.39	1 30	Discounts: 10 cents per M allowed to monthly consumers at the end of the year if their bills have exceeded \$1,000, and have been paid promptly.	1 46		1 31	
Brockton,	17.76	2 25	Discounts: On 1,000 feet and under, 10 cents per M; on 1,000 to 5,000 feet, 15 cents per M; 5,000 feet and over, 25 cents per M; when paid before the 10th of each month.	2 25		2 09	
Brookline,	18.44	2 20	To some large consumers, \$2.	2 18		2 18	
Cambridge,	17.58	2 00	25 cents per M allowed if paid within 25 days; to large consumers, 35 cents, to largest, 50 cents per M allowed.	1 71		1 70	
Charlestown,	17.47	2 00	Discount 25 cents per M if paid in fifteen days. Coal gas and water gas,	1 72		1 72	
Chelsea,	18.13	2 00	. . . . .	2 14		2 12	
Chicopee,	16.97	2 75	Discount 50 cents per M on bills paid within 10 days. Special discounts to manufacturing corporations.	2 25		1 94	
Chicopee Falls,	25.10	4 00	Large consumers \$3. Oil gas, with 30 per cent. of air,	4 45		3 63	
Citizens' (Quincy),	18.23	3 00	Discount of \$1 per M to large consumers,	2 44		2 70	
Citizens' (Wakefield),	17.03	2 50	Discount 10 per cent. on bills amounting to \$500 a year,	3 37		3 35	
Clinton,	17.60	2 50	Discount 5 per cent. on bills paid within 10 days. Large consumers, \$2 per M,	2 19		2 15	
Cottage City,	15.95	2 20	20 cents per M discount for payment within 5 days. Water gas,	2 00		2 00	
Danvers,	15.20	3 50	Discount 10 per cent. and 15 per cent. for prompt payment,	3 26		3 20	
Dedham,	16.07	3 00	Discount 50 cents per M if paid before the 15th of the month,	2 57		2 59	
Dorchester,	17.59	2 70	Discount 50 cents per M on bills paid within 10 days,	2 23		2 24	
East Boston,	17.72	1 75	. . . . .	1 81		1 76	
Easthampton,	18.20	3 00	Discount 6 2/3 per cent, making \$2.80 net. To the town and consumers using 50,000 feet a year the bills are made at \$2.50 per M, with a discount of 4 per cent., making net price \$2.40.	2 70		2 50	
Fall River,	19.36	2 00	Discount 25 cents per M if paid by the 15th of the month. Large consumers \$1.75, with discount as above.	1 76		1 58	

Fitchburg, Gardner,	17.75 47.70	2 00 6 00	Some special contracts, . To hotels for heating, \$4. Largest bills, for cash, 2 per cent. and 5 per cent. Pure oil gas.	1 92 —	1 87 5 61
Gloucester, Great Barrington, Greenfield,	18.65 23 15 16.53	2 00 4 80 2 50	Discount 10 per cent. if paid on or before the 15th of the month, Oil gas, with 20 per cent. of air, Discount 5 per cent. if paid in 5 days,	2 01 4 47 2 06	1 80 4 80 2 38
Haverhill,	18.09	1 70	Discount 20 cents per M if paid on or before the 10th of the month,	1 60	1 52
Holyoke,	18.39	2 00	Discount 25 per cent. to manufacturers and mills; 12½ per cent. to merchants and dwelling-houses.	1 94	1 74
Ipswich,	26.10	3 50	To some consumers, \$2.50. Oil gas, with 25 per cent. of air,	2 72	3 05
Jamaica Plain, Lawrence,	17.83 18.09	2 50 1 70	City buildings, 5 per cent. off net price; 50 cents per M from gross price on bills paid within 15 days. 10 cents per M discount if paid by the 15th of the month. Between 250,000 and 800,000 feet per year, \$1.50, less 10 cents; over 800,000, \$1.30 net.	2 24 1 45	2 20 1 43
Lee,	47.55	7 50	Pure oil gas,	7 50	7 50
Leominster,	28.30	5 00	Discounts: 20 per cent. to manufacturers using more than 4,000 feet a month; 30 per cent. on gas used for heating when 6,000 feet are consumed in one month.	5 08	4 78
Lexington,	28.60	6 00	Oil gas, with 50 per cent. of air. 10 per cent. discount for prompt payment. A few large consumers, special rates.	5 11	5 70
Lowell,	17.69	1 30	Oil gas, with 33½ per cent. air. Discount 5 per cent. per M if paid within 5 days,	1 29	1 19
Lynn,	18.01	2 00	Discount 20 cents per M for payment within 10 days; gas engines, discount 50 per cent. Coal gas and water gas.	1 81	1 79
Malden,	17.43	2 20	20 cents per M discount if bills are paid within 20 days; factories and large consumers, 40 cents, 45 cents and 70 cents per M.	2 16	1 99
Manufacturers' (Fall River),	17.42	2 00	Discounts on less than 500 feet per month, 10 cents per M; on more than 500 feet, 25 cents if paid on or before the 20th of the month. Manufacturing corporations, \$1.50 net.	1 70	1 54
Marblehead,	16.23	3 00	20 cents discount to private consumers if paid before the 16th of the month; 60 cents to the town; \$1 to gas engines.	2 84	2 64
Marlborough,	17.33	2 50	Discount 5 per cent. to large consumers. A few special contracts,	2 67	2 45
Middleborough,	46.70	6 00	Discount 60 cents per M to large manufacturers. Pure oil gas,	—	4 09
Milford,	16.50	2 00	5 per cent. discount on bills exceeding \$50 per month,	1 98	1 97
Miller's River (Athol),	19.00	3 00	Discount 50 cents per M if paid within 20 days; 5 per cent. additional to small mills, etc.; 10 per cent. to large mills, etc. Water gas.	2 41	2 39
Mutual (Southbridge),	23.50	3 00	5 per cent. discount on all gas over 2,000 feet a month consumed for hotel and mechanical purposes. Oil gas, with 30 to 40 per cent. of air.	3 00	3 00
Nantucket,	17.55	3 00	Discount 10 cents per M if paid before the 15th of the month; to consumers using 10,000 feet per quarter, 20 cents.	2 95	2 96
Natick,	17.40	2 70		2 81	2 56

NAME OF COMPANY.	Average Candle- Power.	Gross Price.	REMARKS.	Average Price, 1887-88.	
				Average Price, 1887-88.	Average Price, 1887-88.
New Bedford,	16.93	2 00	Discount 10 per cent. for payment within 5 days; to consumers of 4,000 feet per month, 25 per cent.	\$1 62	\$1 59
Newburyport,	18.03	2 50	Discount 10 per cent. to consumers of less than 1,000 feet per month; 20 per cent. to consumers of more than 1,000 feet per month; for prompt payment.	2 23	2 07
Newton,	17.51	2 50	Consumption of 100,000 feet per year, \$1.90; 200,000 feet, \$1.80; 300,000 feet, \$1.75; 400,000 feet, \$1.70. Day consumption by special meter, \$1.50. General consumers, 25 cents discount for cash in 20 days.	2 19	1 97
North Adams,	17.34	2 00	To some consumers, \$1.75.	2 07	1 91
Northampton,	17.33	2 00	5 per cent. discount to consumers whose bills amount to \$600 per year,	2 22	1 98
North Attleborough,	16.67	2 75	50 cents per M discount if paid on or before the 15th of the month,	2 46	2 23
Norwood,	19.60	3 00	If paid within 15 days, discount of 30 cents per M. Special rate to churches and large consumers.	-	2 47
Pittsfield,	18.76	2 50	Discounts: 10 per cent. on bills of less than 1,000 feet per month; 20 per cent on bills of more than 1,000 feet and less than 25,000 feet per month; 70 cents per M on bills of more than 25,000 feet per month.	2 03	1 90
Plymouth,	15.93	2 50	Special rates to large consumers,	2 26	2 21
Roxbury,	18.10	1 75	5 per cent. discount on bills amounting to \$500 per annum. On bills to city of Boston, on gas sold by meter, 5 per cent.	1 75	1 74
Salem,	18.32	2 00	Discount 10 per cent. if paid in 15 days.	1 80	1 80
South Boston,	17.69	2 00	10 per cent. if bill is paid by the 18th of the month. Special rates to some large consumers.	1 72	1 78
Spencer,	19.33	1 25	\$1.65 on bills averaging \$600 per year; \$1.25 for gas used by the city,	-	1 25
Springfield,	18.24	1 75	To consumers of over 125,000 feet per quarter, \$1.45,	1 95	1 74
Taunton,	18.76	1 65	20 per cent. discount if paid by the 15th of the month,	1 59	1 59
Waltham,	17.62	2 50	Public institutions, \$2,	1 81	1 75
Ware,	17.10	2 50	Public institutions, \$2,	2 93	2 53
Webster,	16.95	2 50	5 per cent. discount for cash and 5 per cent. extra on consumption of 50,000 feet per year.	3 16	2 65
Westfield,	17.63	2 50	Discount of 30 cents per M if paid by the 15th of the month,	2 33	2 35
Woburn,	17.00	2 20	Discount of 30 cents per M if paid by the 15th of the month,	2 00	1 99
Worcester,	17.53	1 80	Discount of 30 cents per M if paid by the 15th of the month,	1 82	1 51

The Citizens' Steam and Gas Light Company, making non-illuminating water gas, is omitted from the preceding table. This gas is sold for fuel at the rate of fifty cents a thousand feet.

The average price to consumers for coal gas, of twenty-three companies making annually more than 30,000,000 feet each, is \$1.4955 per thousand feet. The average price of the remainder of the coal gas companies is \$2.2611, making an average for all of \$1.5581 per thousand. The average price of oil gas is \$4.2638 per thousand feet. The average price for coal gas in 1886 was \$1.72, and in 1887 it was \$1.65 per thousand feet, showing a gradual reduction each year.

In its last report, the Board referred to the Spencer Gas Company as having adopted the policy of a large sale of gas at a low price as one of the means of success. The company is still trying the experiment. In less than two years that it has been manufacturing gas, its output has become very much larger than the average of the twenty-five companies of its class in the State. It may prove, however, on account of the limited number of inhabitants in its territory, that the company has sold its gas at a price too low to afford a reasonable profit. The price in Spencer is \$1.25 per thousand feet. The average price of the twenty-five companies referred to is \$2.26, the highest being \$3.36, and the lowest \$1.98.

A comparison of the three companies in Cambridge, Lowell and Worcester, for a period of ten years, shows that the increase in the output of gas is governed to some extent by the reduction in price. These cities have nearly the same population, and the ratio of growth has been nearly the same in each during the past ten years.

YEAR.	CAMBRIDGE.		LOWELL.		WORCESTER.	
	Gas sold.	Price.	Gas sold.	Price.	Gas sold.	Price.
1878, .	59,131,911	\$3 00	80,471,400	\$2 00	42,935,000	\$2 85
1879, .	57,642,161	3 00	87,676,700	2 00	41,478,400	2 85
1880, .	57,399,173	2 75	99,559,300	1 80	45,778,400	2 25
1881, .	60,544,850	2 75	110,508,300	1 65	54,676,900	2 25
1882, .	64,632,653	2 50	119,695,000	1 65	61,693,200	2 25
1883, .	69,518,500	2 25	135,563,200	1 60	67,746,200	2 00
1884, .	78,670,100	2 00	143,545,400	1 50	71,860,000	2 00
1885, .	86,986,184	2 00	144,528,300	1 40	71,298,300	2 00
1886, .	97,076,686	1 75	161,868,500	1 30	79,272,500	1 80
1887, .	105,383,172	1 75	179,609,800	1 20	86,686,000	1 50

In Cambridge, for the ten years, the increase in sales is 77 per cent., and the decrease in price 41 per cent. Lowell, increase in sales 110 per cent., decrease in price 40 per cent.; Worcester, increase in sales 100 per cent., decrease in price 47 per cent. The reduction in price is only one element in securing an increase in sales of gas. An enterprising and liberal management is also required.

It is a query of many consumers of gas why the price should not be as low in one place as another, where the facilities for obtaining coal and other supplies are equally favorable. It is true that the cost of gas in the holder should be governed largely by the cost of coal, and should vary according to the tariff for freights. In the twenty largest companies the cost in the holder varies from sixty-three to eighty-six cents per thousand cubic feet. But there are several other important factors which enter into the final cost of gas to the company, and which govern the price charged, that differ widely in companies similarly situated in regard to the cost of coal. These are the amount obtained from residuals, the amount paid for taxes, and the capitalization. In the twenty largest companies the amount received for residuals varies from ten to twenty-five cents per thousand feet. In the same companies the extremes of taxation are five and nineteen cents, and to pay a ten per cent. dividend the range is from eighteen to sixty-seven cents per thousand feet. From these figures it will be seen that the company that can manufacture gas and put it in the holder at the lowest cost may not be able, on account of other conditions, to sell gas as cheaply as another company, whose gas is put in the holder at the highest cost, but which is fortunate in the sales of residuals, low taxation and small capital.

The subject of capitalization has been discussed in previous reports, but it cannot be too strongly impressed upon the companies that an over-capitalization, or watered stock, is a perpetual and unjust burden upon consumers. The capital necessary for the business should be used, and no more. The stockholders of a company are only entitled to fair and reasonable dividends on the actual amount of cash they have paid in. The money used in the extension and improvement of the plant, if paid out of surplus earnings, should

not be capitalized, but should be for the benefit of consumers in reducing the price of gas. With few exceptions, the companies in this State are conservative in the amount of their capital, and the stockholders are satisfied with reasonable dividends.

The following table shows the amount of gas made in the year ending June 30, 1888, and in the year ending June 30, 1887; the amount sold by meter and to public lamps in both these years; the amount used at works and offices, and the amount of gas unaccounted for during the year ending June 30, 1888, and the percentage of unaccounted-for gas both years : —

Coal Gas.

NAME OF COMPANY.	Gas made Year ending June 30, 1888.	Gas made Year ending June 30, 1887.	Gas sold by Meter Year ending June 30, 1888.	Gas sold by Meter Year ending June 30, 1887.	Gas sold for Public Lamps Year ending June 30, 1888.	Gas sold for Public Lamps Year ending June 30, 1887.	Gas used at Works and Offices Year ending June 30, 1888.	Gas unaccounted for Year ending June 30, 1888.	Percent- age unac- counted for, 1887-8.	Percent- age unac- counted for, 1886-7.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.		
Adams,	7,716,500	6,660,000	5,302,470	5,347,080	625,000	625,000	15,000	1,774,030	22.93	10.10
Amesbury,	4,482,975	-	3,687,800	-	150,000	-	50,000	600,175	13.47	-
Arlington,	7,190,540	7,082,720	4,992,628	4,522,200	649,500	905,500	109,200	1,438,212	20.02	21.99
Attleborough,	5,995,000	5,821,000	5,821,000	5,404,800	-	-	114,900	998,700	14.40	7.46
Beverly,	6,406,300	6,257,800	4,591,600	4,044,300	346,700	452,000	80,000	1,387,700	21.65	26.87
Boston,	1,292,223,300	1,140,111,500	1,078,622,700	1,010,911,210	55,171,900	56,898,600	-	88,428,700	6.15	6.34
Brookline,	15,939,600	16,835,800	12,174,300	12,189,400	-	-	337,200	2,898,100	18.12	24.10
Brookline,	58,434,600	47,912,500	32,476,700	29,034,300	12,945,374	12,662,356	231,400	7,781,026	14.56	12.19
Cambridge,	117,743,000	111,690,000	94,840,576	88,042,985	10,662,794	12,911,895	1,220,800	11,018,830	9.35	9.10
Charlestown,	86,998,000	78,299,000	58,894,633	52,850,773	14,938,842	15,460,840	910,000	12,864,525	14.79	11.62
Chelsea,	39,774,000	34,742,000	26,068,190	22,290,340	4,656,223	4,392,519	405,800	8,643,787	21.73	21.66
Chicopee,	9,707,000	7,984,750	7,809,600	6,251,100	119,448	437,476	65,000	1,652,952	17.03	15.42
Citizens' (Quincy),	7,732,000	6,877,700	3,636,600	3,425,200	1,455,100	1,340,000	347,300	2,903,000	15.02	19.73
Citizens' (Wakefield),	5,721,200	5,609,796	3,670,900	3,696,000	384,900	298,730	111,800	1,553,600	27.15	26.69
Clinton,	7,904,840	8,137,870	6,365,600	6,752,400	27,446	59,003	157,600	1,554,194	17.13	13.22
Danvers,	1,825,700	1,648,000	1,114,000	974,600	-	-	70,400	641,300	35.12	40.86
Dedham,	7,665,000	7,777,360	5,473,100	5,508,900	507,300	848,792	162,000	1,522,600	19.86	15.83
Dorchester,	57,819,900	50,125,400	29,626,800	24,946,400	19,895,555	18,259,776	340,200	7,657,345	13.24	13.22
East Boston,	37,464,000	34,300,000	22,924,000	19,292,200	10,926,555	12,013,895	210,000	4,275,645	10.84	8.12
Eastampton,	3,800,680	3,691,890	2,636,400	2,551,550	186,400	198,200	25,000	652,890	17.17	16.70
Fall River,	50,507,700	46,395,000	40,145,500	37,553,300	2,943,224	2,838,553	448,700	6,970,268	13.79	12.15
Fitchburg,	16,383,700	12,877,900	14,207,200	10,868,400	850,000	797,300	100,000	1,963,808	10.98	12.73
Glenchester,	12,422,000	10,241,400	8,682,000	8,682,000	716,792	229,690	101,800	984,292	24.51	19.45
Greenfield,	4,015,700	5,298,300	2,929,608	3,934,900	-	-	250,000	1,156,600	2.52	4.84
Haverhill,	42,875,000	38,096,000	38,474,700	33,220,600	2,093,700	2,804,100	391,700	5,179,839	11.16	9.02
Holyoke,	46,411,179	39,462,700	38,216,200	38,216,200	398,840	411,940	500,000	4,391,280	13.57	13.88
Jamaica Plain,	32,354,000	28,502,900	16,869,591	15,147,300	10,543,129	8,899,138	476,700	8,064,110	10.02	10.02
Lawrence,	73,775,865	71,886,090	65,980,275	65,980,275	-	-	-	6,592,300	3.35	5.01
Lowell,	181,699,000	176,148,400	163,167,900	163,167,900	7,550,700	7,891,400	1,803,600	8,305,200	14.60	14.89
Lynn,	57,521,300	50,762,300	43,898,100	39,986,500	2,513,400	2,465,800	804,600	3,819,100	11.61	12.40
Malden,	32,068,200	26,911,900	25,284,300	20,321,300	2,706,300	2,859,400	258,300	1,583,500	11.91	9.02
Manufacturers' (Fall River),	13,297,900	13,022,400	10,726,210	10,897,150	860,890	813,000	144,700	531,541	13.08	12.16
Marblehead,	4,213,400	3,610,000	3,140,300	2,748,871	378,930	285,500	124,300	863,230	18.15	17.96
Marlborough,	4,920,240	4,220,860	3,826,600	3,186,400	88,170	141,840	112,040	-	-	-

Milford,	9,153,000	7,283,550	8,108,800	6,276,000	410,000	461,000	52,000	587,250	6.42	6.80
Miller's River (Athol),	3,250,000	2,400,000	2,125,800	1,755,000	425,000	425,000	250,000	440,200	13.82	8.12
Nantucket,	2,571,700	2,381,000	1,591,600	1,692,600	474,850	457,120	47,500	437,750	17.80	9.18
Natick,	3,711,900	2,974,500	3,091,300	2,501,200	119,000	114,900	120,300	381,100	10.27	6.67
New Bedford,	47,947,100	44,514,100	36,787,000	34,458,500	6,721,000	5,900,000	200,000	3,938,100	8.21	8.43
Newburyport,	10,603,063	9,356,030	8,712,900	7,108,100	660,000	106,700	200,000	1,030,160	9.71	9.40
Newton,	45,298,000	42,276,500	31,216,800	31,216,800	5,845,420	6,722,400	441,200	4,608,980	10.17	9.17
North Adams,	17,076,900	15,131,400	12,607,800	11,354,400	1,002,200	1,842,000	370,000	2,100,000	10.22	10.37
Northampton,	10,678,700	9,905,200	9,449,900	8,711,800	—	—	117,900	1,112,500	10.42	12.24
North Attleborough,	12,047,810	11,718,650	10,835,700	10,310,500	—	—	140,100	1,072,910	8.90	10.28
Norwood,	14,118,000	13,997,000	11,292,400	793,250	—	2	—	—	—	—
Pittsfield,	4,126,830	3,993,940	11,376,850	11,517,700	927,960	1,173,000	215,000	1,598,190	11.32	7.83
Plymouth,	3,993,940	3,413,000	3,413,000	3,325,500	321,010	311,175	111,200	285,320	6.91	5.26
Roxbury,	4,147,382,000	4,147,382,000	116,086,600	106,416,931	30,358,441	29,588,222	308,000	15,534,450	9.50	7.18
Salem,	44,265,000	42,684,000	36,891,000	34,107,800	984,445	1,910,619	215,400	6,174,154	13.65	14.40
South Boston,	65,004,976	60,300,000	45,882,721	42,670,991	12,581,059	12,280,558	248,000	6,235,190	9.68	8.31
Spencer,	10,135,200	9,130,400	9,130,400	—	—	2	123,800	861,000	8.49	—
Springfield,	74,754,000	67,213,000	65,434,000	55,981,000	3,750,000	3,750,000	1,881,000	4,599,600	6.15	10.22
Taunton,	33,338,000	29,620,000	30,127,900	27,256,700	1,322,100	1,266,700	611,000	1,247,000	3.74	1.66
Waltham,	30,137,500	26,225,400	26,840,160	23,345,800	1,135,870	1,283,400	209,700	1,893,770	6.28	4.81
Ware,	5,001,760	4,276,030	4,259,100	3,691,800	214,600	232,885	50,700	408,300	9.36	6.71
Websker,	2,207,200	2,230,570	71,207,600	81,193,500	324,000	245,000	141,000	534,400	24.20	36.76
Worcester,	6,503,700	5,494,600	5,387,077	4,524,900	264,573	308,000	41,500	900,550	13.66	11.00
Woburn,	7,942,200	7,385,400	6,911,000	6,074,150	103,555	654,298	219,900	707,085	8.00	6.61
Worcester,	100,724,500	87,613,600	86,826,500	75,608,100	4,147,300	4,783,600	751,800	8,985,500	8.92	7.11

Oil Gas.

Anchored,	713,613	731,403	57,000	42,390	—	—	—	—	—	—
Chicopee Falls,	10 615,680	550,500	9	—	—	—	—	—	—	—
Gardner,	55,400	—	—	—	—	—	4,000	120,000	—	—
Great Barrington,	476,500	422,900	—	—	—	—	—	67,800	12.47	—
Ipawich,	1,062,370	1,162,250	—	—	—	—	—	—	—	—
Lee,	266,020	203,652	—	—	—	—	—	—	—	—
Leominster,	1,481,530	1,237,040	294,516	399,692	—	—	25,000	176,039	8.90	14.10
Lexington,	539,040	545,210	200,000	200,000	—	—	10,000	200,000	3.82	14.49
Middleborough,	865,053	9	—	9	—	—	18,000	124,000	12.31	—
Mutual (Southbridge),	1,222,100	1,223,300	37,733	192,000	—	—	—	252,717	16.71	10.27

¹ Process changed from oil gas to water gas, September 1. Figures for ten months only. ² Not returned. ³ Includes 10,837,500 feet bought from the Bay State Gas Company. ⁴ Includes 1,700,000 feet bought from the Boston Gas Light Company. ⁵ Includes 2,222,000 feet used in the mills of the company. ⁶ Includes 2,130,290 feet used in the mills of the company. ⁷ Includes 348,390 feet used in the mills of the company. ⁸ Includes 355,000 feet used in the mills of the company. ⁹ Quantities not given. ¹⁰ Quantity of gas used in the mills of the company not known. ¹¹ Began operations Feb. 1, 1888. ¹² Gas bought.

The following table shows the greatest and least daily output of each of the companies, and the date of the same : —

NAME OF COMPANY.	Greatest Output.	Date.	Least Output.	Date.
Adams,	1 —	—	—	—
Amesbury,	40,326	Dec. 16,	3,700	June 30
Amherst,	2 —	—	—	—
Arlington,	33,180	Dec. 21,	8,040	July 6
Attleborough,	42,000	Nov. 20,	10,000	Apr. 27
Beverly,	31,800	Dec. 15,	7,000	July 4
Boston,	5,932,388	Dec. 21,	909,796	July 24
Brockton,	78,200	Dec. 22,	10,400	July 4
Brookline,	230,500	Dec. 21,	73,600	July 7
Cambridge,	590,000	Dec. 21,	102,000	July 31
Charlestown,	377,000	Dec. 21,	112,000	July 13
Chelsea,	172,000	Dec. 22,	57,000	July 2
Chicopee,	64,200	Dec. 6,	6,900	June 11
Chicopee Falls,	2 —	—	—	—
Citizens' (Quincy),	2 —	—	—	—
Citizens' (Wakefield),	32,200	Dec. 16,	6,600	June 21
Clinton,	53,770	Dec. 16,	8,800	June 11
Cottage City,	24,000	Aug. —,	2,000	Feb. —
Danvers,	8,920	Jan. 7,	2,584	June 18
Dedham,	38,824	Dec. 8,	7,770	July 30
Dorchester,	257,250	Dec. 29,	80,200	July 7
East Boston,	163,000	Jan. 2,	49,800	July 24
Easthampton,	25,000	Dec. 19,	5,500	July 25
Fall River,	319,900	Dec. 15,	40,400	June 17
Fitchburg,	87,900	Dec. 15,	12,400	July 3
Gloucester,	2 —	—	—	—
Great Barrington,	1 —	—	—	—
Greenfield,	18,100	Dec. 31,	5,100	June 17
Haverhill,	230,000	Dec. 15,	47,900	May 6
Holyoke,	271,326	Nov. 5,	41,590	July 2
Ipswich,	3 —	—	—	—
Jamaica Plain,	152,468	Jan. 5,	42,477	July 25
Lawrence,	456,436	Dec. 5,	55,254	May 22
Lee,	3 —	—	—	—
Leominster,	2 —	—	—	—
Lexington,	3 —	—	—	—
Lowell,	1,255,000	Nov. 25,	141,000	June 17
Lynn,	300,300	Dec. 21,	41,300	July 31
Malden,	151,700	Jan. 7,	27,600	July 4
Manufacturers' (Fall River),	109,100	Dec. 21,	11,500	May 21
Marblehead,	25,554	Feb. 8,	4,100	June 18
Marlborough,	33,070	Dec. 31,	4,100	July 15
Middleborough,	1 —	—	—	—
Milford,	56,400	Dec. 15,	9,060	June 10
Miller's River (Athol),	19,000	Dec. —	1,100	June —
Mutual (Southbridge),	1 —	—	—	—
Nantucket,	13,510	Aug. 21,	3,480	May 21
Natick,	21,900	Nov. 20,	3,000	July 4
New Bedford,	215,000	Dec. 24,	49,000	July 4

1 Not returned.

2 No record kept.

3 No station meter.

NAME OF COMPANY.	Greatest Output.	Date.	Least Output.	Date.
Newburyport,	58,600	Dec. 8,	9,920	July 4
Newton,	198,500	Jan. 20,	43,000	July 2
North Adams,	86,800	Dec. 16,	16,500	July 4
Northampton,	56,925	Dec. 15,	8,297	June 12
North Attleborough, . .	63,026	Dec. 15,	8,462	June 17
Norwood,	—	—	—	—
Pittsfield,	71,000	Dec. 20,	—	—
Plymouth,	22,290	Dec. 21,	5,640	May 27
Roxbury,	689,000	Dec. 23,	207,000	July 3
Salem,	206,000	Dec. 17,	54,000	July 4
South Boston,	292,618	Dec. 24,	89,211	July 24
Spencer,	53,000	Nov. 15,	5,000	July 16
Springfield,	380,000	Dec. 16,	66,000	July 4
Taunton,	212,000	Nov. 25,	41,000	June 20
Waltham,	180,400	Nov. 25,	17,700	July 4
Ware,	35,800	Nov. 26,	3,600	Aug. 1
Webster,	—	—	—	—
Westfield,	42,500	July 4,	6,000	July 24
Woburn,	41,200	Dec. 31,	11,300	July 5
Worcester,	501,300	Dec. 15,	112,600	June 17

¹ Not returned.² No station meter.

The following tables show the total quantity of gas sold during the year ending June 30, 1888; the percentage of increase in sales over the previous year; the capital (including bonds) per thousand feet sold; the average price received for all gas sold during the year ending June 30, 1888; and the average price received the year previous:—

Coal-Gas Companies.

[Boldface figures show decrease.]

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1886-87. Per cent.	Capital per M sold, including Bonds.	Average price received per M for gas sold, 1887-88.	Average price received per M for gas sold, 1886-87.
	Feet.				
Adams,	5,927,470	7.69	\$2.919	\$2.35	\$2.41
Amesbury,	3,837,800	—	15.634	1.98	—
Arlington,	5,642,128	3.95	12.435	2.69	3.00
Attleborough,	5,821,400	7.70	6.390	2.25	2.25
Beverly,	4,938,300	9.92	10.431	2.57	2.59
Boston,	1,133,794,600	6.15	2.205	1.31	1.45
Brockton,	12,754,300	1.70	7.762	2.09	2.24
Brookline,	45,422,074	8.85	11.448	2.16	2.18
Cambridge,	105,503,370	4.50	6.633	1.68	1.69
Charlestown,	73,223,475	7.19	6.797	1.72	1.72
Chelsea,	30,724,413	15.14	9.719	2.10	2.12
Chicopee,	7,989,048	19.44	3.755	1.95	2.30
Citizens' (Quincy),	5,081,700	6.64	9.052	2.38	2.44
Citizens' (Wakefield),	4,055,800	1.53	23.497	3.32	3.36
Clinton,	6,393,066	6.14	7.821	2.15	2.19
Cottage City,	2,046,600	—	39.250	2.00	—
Danvers,	1,114,000	14.30	20.197	3.20	3.27
Dedham,	5,980,400	5.93	18.226	2.67	2.82
Dorchester,	49,822,355	15.31	8.029	2.14	2.14
East Boston,	33,190,355	6.01	6.628	1.76	1.81
Easthampton,	3,122,800	2.38	9.607	2.50	2.68
Fall River,	43,571,734	7.86	6.610	1.57	1.76
Fitchburg,	15,057,200	29.07	3.985	1.86	1.90
Gloucester,	10,958,192	16.71	5.685	1.80	2.01
Greenfield,	2,929,608	29.66	17.238	2.39	2.59
Haverhill,	41,468,400	15.14	2.772	1.51	1.60
Holyoke,	40,839,640	8.25	—	1.74	1.97
Jamaica Plain,	27,462,720	14.24	8.739	2.12	2.15
Lawrence,	71,886,092	8.95	6.691	1.43	1.43
Lowell,	183,679,100	7.37	2.162	1.19	1.29
Lynn,	48,411,500	14.04	6.197	1.79	1.83
Malden,	27,990,600	20.74	7.888	1.99	2.16
Manufacturers' (Fall River),	11,587,100	1.05	4.315	1.54	1.71
Marblehead,	3,519,230	15.97	11.934	2.76	2.81
Marlborough,	3,914,770	17.62	12.772	2.44	2.70
Milford,	8,518,800	26.43	8.487	1.97	1.98

¹ Quantity last year not returned.

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1888-87, per cent.	Capital per M sold, including bonds.	Average price received per M for gas sold, 1887-88.	Average price received per M for gas sold, 1888-87.
	Feet.				
Miller's River (Athol), . . .	2,550,800	18.92	\$23.522	\$2.45	\$2.40
Nantucket,	2,066,450	2.51	17.491	2.78	2.80
Natick,	3,210,300	19.96	9.189	2.55	2.81
New Bedford,	43,508,000	7.80	8.504	1.58	1.63
Newburyport,	9,372,900	14.65	8.535	2.00	2.13
Newton,	40,244,820	6.20	4.872	2.03	2.25
North Adams,	14,600,000	10.80	3.972	1.83	1.96
Northampton,	9,449,900	8.47	5.291	1.98	2.10
North Attleborough,	10,835,700	5.00	12.569	2.23	2.47
Norwood,	1,292,400	62.92	9.263	2.47	2.52
Pittsfield,	12,304,810	3.04	5.079	1.99	2.01
Plymouth,	3,734,910	2.65	10.712	2.23	2.27
Roxbury,	146,445,941	7.67	4.897	1.71	1.73
Salem,	37,875,446	4.89	7.321	1.80	1.80
South Boston,	58,463,780	6.39	7.697	1.74	1.78
Spencer,	9,150,400	¹	17.485	1.29	
Springfield,	69,170,000	15.84	8.067	1.72	1.94
Taunton,	31,450,000	10.29	2.544	1.59	1.59
Waltham,	27,974,030	13.58	6.008	1.81	1.92
Ware,	2,251,700	29.37	—	² 2.54	² 2.55
Webster,	1,182,300	20.21	—	² 2.57	² 3.33
Westfield,	5,651,650	16.94	12.414	2.34	2.33
Woburn,	7,015,215	4.27	6.429	1.99	2.07
Worcester,	91,725,600	14.00	5.724	1.51	1.82

Oil-Gas Companies.

Amherst,	713,613	0.41	\$14.923	\$5.36	\$5.39
Chicopee Falls,	615,680	11.18	—	² 3.63	² 4.79
Gardner,	² 55,400	—	—	5.61	—
Great Barrington,	476,500	12.67	10.493	4.80	4.47
Ipswich,	1,061,850	8.68	22.706	3.05	2.72
Lee,	256,020	15.89	—	7.50	7.50
Leominster,	1,776,066	14.82	28.152	4.81	5.06
Lexington,	739,040	0.83	30.810	5.26	4.84
Middleborough,	865,033	¹	—	4.09	¹
Mutual (Southbridge), . . .	1 583	11.61	11.906	3.00	3.00
	259.				

¹ Quantity last year not returned.

² Average price for gas sold to the public.

³ Works in operation but five months.

The following tables show the capital (including bonds), the gas sold, the gas unaccounted for, and the number of consumers per mile of main; also the gas sold per consumer and per meter light:—

Coal-Gas Companies.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unaccounted for.	Number of Consumers.		
		Feet.	Feet.		Feet.	Feet.
Adams,	\$3,460	1,060,494	354,806	29.8	35,587	3,621
Amesbury,	9,772	624,723	98,563	21.3	25,151	3,367
Arlington,	3,413	275,725	73,647	17.2	14,100	2,370
Attleborough,	10,478	1,621,060	278,103	58.2	27,853	5,461
Beverly,	8,533	814,217	228,616	59.3	12,754	2,629
Boston,	19,318	8,759,324	683,322	220.1	37,877	3,934
Brockton,	7,984	1,028,572	233,718	53.4	19,266	3,008
Brookline,	9,878	862,781	147,816	27.5	22,382	3,172
Cambridge,	8,761	1,320,442	137,590	61.1	19,410	3,556
Charlestown,	12,919	1,806,921	332,416	94.0	20,116	4,147
Chelsea,	6,782	694,651	195,428	33.2	17,745	3,571
Chicopee,	8,571	2,282,585	472,271	42.8	52,064	3,798
Citizens' (Quincy),	5,750	635,212	287,875	34.4	10,504	2,211
Citizens' (Wakefield),	4,765	202,790	77,680	16.0	11,471	1,453
Clinton,	11,210	1,433,421	303,621	48.0	29,745	1,707
Cottage City,	39,433	993,495	—	46.1	21,542	3,054
Danvers,	8,123	402,166	231,516	36.8	10,915	1,477
Dedham,	9,038	495,857	126,252	23.6	19,203	2,600
Dorchester,	8,071	1,005,273	154,506	42.5	14,203	2,756
East Boston,	11,276	1,701,200	208,284	66.6	25,531	6,440
Easthampton,	8,241	857,912	179,365	48.1	16,779	1,527
Fall River,	15,190	2,298,087	365,821	57.4	37,310	2,738
Fitchburg,	5,343	1,340,811	82,502	46.5	27,164	3,496
Gloucester,	11,286	1,985,157	247,066	103.4	17,935	3,946
Greenfield,	10,721	621,997	208,979	48.0	12,963	3,191
Haverhill,	7,502	2,705,701	75,446	108.3	23,163	4,154
Holyoke,	—	2,841,583	360,408	84.5	33,284	3,794
Jamaica Plain,	9,174	1,049,798	167,862	40.6	15,869	2,759
Lawrence,	17,549	2,622,623	294,057	78.8	33,280	4,953
Lowell,	7,418	2,725,125	97,820	98.8	26,448	3,447
Lynn,	11,682	1,885,173	323,411	75.0	23,819	4,076
Malden,	4,591	582,046	79,416	29.9	17,570	2,958
Manufacturers' (Fall River),	11,111	2,574,911	351,888	51.1	46,635	2,082
Marblehead,	13,291	1,113,677	174,443	68.0	14,606	1,629
Marlborough,	19,684	1,541,250	351,665	63.0	23,916	2,563
Milford,	10,616	1,250,925	86,237	62.3	19,125	3,036
Miller's River (Athol),	20,618	876,563	154,354	44.0	16,992	2,705
Nantucket,	7,438	426,952	94,576	31.8	10,335	2,307
Natick,	8,357	909,433	107,960	57.5	15,228	1,597
New Bedford,	13,523	1,590,205	143,973	84.6	15,897	3,268
Newburyport,	9,216	1,077,344	118,409	47.1	21,251	3,559
Newton,	3,437	691,267	79,205	31.5	18,920	3,270
North Adams,	6,035	1,533,309	218,522	58.4	28,470	3,736
Northampton,	5,834	1,100,136	129,813	45.1	24,418	3,346
North Attleborough,	15,782	1,255,585	124,219	39.0	32,153	4,666
Norwood,	2,848	306,255	—	9.4	32,310	2,143
Pittsfield,	8,213	1,616,922	210,012	78.9	18,930	4,137
Plymouth,	11,428	1,066,860	81,520	64.0	15,236	2,378
Roxbury,	8,746	2,134,767	226,449	89.5	19,069	3,570
Salem,	11,797	1,489,400	242,790	92.0	15,772	3,256
South Boston,	16,753	2,176,610	234,396	79.7	21,440	4,229

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unaccounted for.	Number of Consumers.		
		Feet.	Feet.		Feet.	Feet.
Spencer,	15,488	885,808	83,349	30.9	28,595	5,402
Springfield,	15,052	1,865,929	124,078	80.2	21,994	3,578
Taunton,	4,459	1,753,066	727,853	59.6	28,173	3,487
Waltham,	11,148	1,856,273	106,958	50.8	35,039	5,156
Ware,	—	2,143,113	220,924	53.8	37,361	2,830
Webster,	—	612,640	213,840	48.4	12,657	2,527
Westfield,	13,384	1,080,621	172,190	56.8	18,138	3,416
Woburn,	7,968	1,239,437	124,926	67.7	18,049	3,100
Worcester,	13,729	2,398,667	234,436	100.0	22,914	4,674

Oil-Gas Companies.

Amherst,	2,805	187,954	—	27.6	6,315	1,456
Chicopee Falls,	—	580,830	—	61.3	9,487	1,769
Gardner,	—	—	—	—	—	—
Great Barrington,	3,333	316,333	45,260	42.0	7,563	1,361
Ipswich,	8,669	381,787	—	33.8	11,291	990
Lee,	—	178,807	—	53.0	3,372	1,304
Leominster,	7,692	273,240	27,082	31.3	7,262	1,501
Lexington,	8,528	276,794	—	34.4	5,859	1,493
Middleborough,	—	234,432	33,604	30.0	7,793	1,683
Mutual (Southbridge),	7,960	670,124	134,733	92.5	7,023	1,371

¹ Works in operation only five months.

The following table shows the number of tons of coal carbonized in 1887-88 and 1886-87, the kind and quantities of enricher used by the various coal-gas companies, and the percentage of cost of coal received from residuals:—

NAME OF COMPANY.	Number of tons of coal carbon- ized, year ending June 30, 1888.	Number of tons of coal carbon- ized, year ending June 30, 1887.	Enricher used.	Cannel. Tons.	Naphtha. Gallons.	Residuum. Barrels.	Oil. Gallons.	Percentage of cost of coal received from residual products.
Adams,	707	666	Oil,	—	—	—	—	25.57
Arlington,	657	652	Crude oil,	—	—	—	756	14.14
Attleborough,	791	659	Cannel,	—	—	—	90	22.87
Beverly,	706	687	Cannel,	2	—	—	—	22.97
Boston,	106,396½	100,883	Cannel, albertite, naphtha,	2,102½	764,752	—	—	36.60
Brookton,	1,412½	1,593	Cannel, naphtha, residuum, rosin,¹	10	6,408	15	—	34.37
Brookline,	4,709½	4,038	Cannel, gas oil,	147¼	—	—	—	32.28
Cambridge,	10,147	9,397	Oil,	—	—	—	17,235	35.29
Charlestown,	7,294	6,375	Naphtha,	—	—	—	48,910	45.65
Chelsea,	3,989	3,548	Gas oil,	—	—	—	—	40.11
Chicopee,	900	724	Cannel,	76	244,079	—	11,305	22.05
Citizens' (Quincy),	694½	625½	Rosin,	—	—	—	—	15.02
Citizens' (Wakfield),	759	702	Oil,	—	—	—	—	6.41
Clinton,	653	734	Oil,	—	—	—	5,955	30.13
Danvers,	184	168	Cannel, residuum,	—	—	—	—	—
Dedham,	745½	798½	Cannel, gas oil,	10¼	—	24	—	21.82
Dorchester,	5,379¼	4,635	Cannel, naphtha, residuum, oil,	125¾	—	—	3,480	27.91
East Boston,	3,852	3,287	Cannel, naphtha,	51	198	39	—	34.08
Easthampton,	429	418	Cannel, naphtha,	½	19	—	40	5.55
Fall River,	4,213	3,879	Cannel, naphtha,	—	—	—	—	22.30
Fitchburg,	1,332	876	Cannel, naphtha,	58	2,255	—	—	40.60
Gloucester,	1,113	968½	Cannel, gas oil,	5½	—	—	5,151	34.34
Greenfield,	447	533	Cannel, oil,	1	—	—	40	14.83
Haverhill,	4,322	4,089	Cannel, residuum, crude petroleum,	66	—	—	—	41.83
Holyoke,	4,017½	3,716	Cannel, residuum, crude petroleum,	94¼	—	138	5,747	38.34
Jamaica Plain,	3,008	2,610	Cannel, gas oil,	160	—	—	—	32.06
Lawrence,	7,060	6,361	Cannel, gas oil,	280	—	—	6,435	47.82
Lynn,	17,050	17,327	Naphtha, crude Lima oil,	39	90,085	—	—	60.28
Malden,	4,908	3,489	Cannel, naphtha,	—	—	—	—	37.23
Manufacturers' (Fall River),	3,049	2,787½	Gas oil,	—	923,890	—	5,300	26.11
Manufacturers' (Fall River),	1,068½	1,081	Cannel,	101¼	—	—	7,715	29.75

Marblehead,	436	366 $\frac{1}{4}$	Naphtha,	-	400	-	-	736
Marlborough,	487	805	Gas oil,	-	-	-	1,350	12,67
Milford,	1,017	805	Residuum,	-	-	-	-	30,71
Nantucket,	219	237 $\frac{1}{4}$	-	-	-	-	-	11,89
Natick,	379	326	Oil,	-	-	-	46	18,96
New Bedford,	4,115	4,124	Cannel, naphtha,	58	1,415	-	-	46,30
Newburyport,	1,006	883	Cannel, oil,	5	-	-	3,060	24,65
Newton,	3,820	3,678	Crude Lima oil,	-	-	-	22,276	27,74
North Adams,	1,540	1,292	Cannel, naphtha,	67	-	-	-	20,09
Northampton,	1,053 $\frac{1}{2}$	909	Cannel, Gas oil,	23 $\frac{1}{4}$	-	-	-	25,53
North Attleborough,	1,073 $\frac{1}{4}$	1,061	-	-	-	-	1,104	29,03
Norwood,	206	100	-	-	-	-	-	-
Pittsfield,	1,400	1,020 $\frac{1}{2}$	Cannel,	115	-	-	-	26,18
Plymouth,	395	352	Cannel,	28	-	-	-	12,42
Roxbury,	14,225	13,604	Naphtha,	-	58,330	-	-	42,77
Salem,	3,522 $\frac{1}{4}$	3,377	Cannel,	309 $\frac{1}{4}$	-	-	-	25,32
South Boston,	6,302 $\frac{1}{4}$	5,703	Cannel, residuum, naphtha,	203 $\frac{1}{4}$	1,234	-	-	33,06
Spencer,	909	4	-	-	-	-	-	13,39
Springfield,	6,293	5,471	Cannel, crude Lima oil,	227	-	-	25,358	40,27
Taunton,	3,154	2,808	Gas oil,	-	-	-	2,045	31,74
Waltham,	2,737	2,454	Cannel, naphtha,	20	3,340	-	-	47,60
Ware,	482	446	Cannel,	41	-	-	-	18,30
Webster,	250	233	-	-	-	-	-	15,32
Westfield,	550 $\frac{1}{2}$	470	Cannel, oil,	50 $\frac{1}{2}$	-	-	1,800	24,97
Woburn,	786	726 $\frac{1}{4}$	Cannel, gas oil,	30	-	-	1,773	34,23
Worcester,	8,087	6,656	Naphtha,	-	310,500	-	-	43,99

¹ 955 lbs.² Includes quantity used for water gas.³ Not including quantity used for water gas.⁴ Not returned.

The following tables show the materials and quantity of each used in the manufacture of water and oil gas, also the process used and the quantity of water gas made:—

Water Gas.

NAME OF COMPANY.	Process used.	Materials used in Generator.	Quantity used. Tons.	Enricher used.	Quantity used. Gallons.	Gas made. Feet.
Amesbury, .	Granger, .	Broken coal, .	¹ 212	Naphtha, .	25,444	4,492,975
Bay State, .	Flannery, .	Anthracite, .	² 462½	Naphtha, .	72,872	12,846,879
Charlestown, .	Granger, .	Coke, .	³	Naphtha, .	44,079	6,500,000
Cottage City, .	Loomis, .	Bituminous coal, .	⁴	Naphtha, .	⁴	⁴
Fall River, .	Lowe, .	Pittston coal, .	⁵ 204½	Petroleum, .	49,960	7,486,000
Lynn, .	Granger, .	Coke, .	⁶	Naphtha, .	8,038	1,395,800
Miller's River (Athol), .	Granger, .	Coal, .	⁷ 87	Naphtha, .	13,000	3,250,000
Spencer, .	Evans, .	Coke, .	⁸ 18	Naphtha, .	19,921	805,600
Worcester, .	Granger, .	{ Lehigh coal, .	⁹ 45 {	Naphtha, .	68,200	10,342,100
		{ Coke, .	137 {			

¹ Broken coal used for making steam, included in amount used in generator.

² Coal used for steam, included in quantity used in generator.

³ 226 chaldrons coke used in generator, 1,704 chaldrons used for steam; but steam from same boilers is used for electric light plant.

⁴ Quantities not given.

⁵ 907 bush. coke and 2,067 bush. slack and screenings used for generating steam.

⁶ One to one and a half bushels coke per thousand feet used in generator. Coke used for steam, quantity not given.

⁷ 57 tons coal used for generating steam.

⁸ 257 tons coke used for generating steam.

⁹ About one-sixth bushel coke used for generating steam.

Oil Gas.

NAME OF COMPANY.	Materials used.	Quantity used. Gallons.	Fuel used.	Quantity used.
Amherst,	Naphtha, .	13,007	Coke,	2,171 bush.
Chicopee Falls,	Petroleum, .	22,980	Anthracite,	71½ tons.
Gardner, ¹	Naphtha, .	2,800	²	²
Ipswich,	Petroleum, .	25,000	Coal,	68 tons.
Lee,	Petroleum, .	5,553	Coke,	2,000 bush.
Leominster,	Petroleum, .	20,165	Cumberland coal, .	104 tons.
Lexington,	Petroleum, .	10,564	Anthracite,	68 tons.
Middleborough,	{ Naphtha, .	4,354 {	Wood,	55 cords.
	{ Gas oil, .	5,378 {		
Mutual (Southbridge),	Petroleum, .	11,680	Anthracite, ³	25½ tons.

¹ Works in operation five months only.

² Eight cords of wood and what wood had been cut off the land.

³ Four cords of wood.

STREET MAINS.

The following table shows the lengths and sizes of the mains, as returned by the companies. Although showing an increase in accuracy over any preceding year, there are still many companies the length of whose mains are estimated. It would seem as if the companies might easily obtain an accurate measurement of the total length, by measuring on a map the streets in which mains are laid; and little by little, as the streets are opened for repairs or for laying services, they can ascertain what sizes are in each street.

The total increase during the year was about sixty miles, eighteen miles of which is due to companies which appear in this list for the first time. The other forty-two miles is distributed among forty-nine companies, and twenty-one companies report no extension during the year.

NAME OF COMPANY.	DIAMETER IN INCHES.															Total Length in Feet.	Length in Miles and Feet.	Increasing Year.	
	1	1 1/4	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	20	24				
Adams,	-	-	-	-	-	7,560	2,640	10,020	-	-	-	-	-	-	-	-	20,400	6 770	20,850
Amesbury,	-	-	390	6,280	-	13,850	10,500	3,000	200	100	-	-	-	-	-	-	32,450	4 537	1,301
Amherst,	-	2,400	9,607	-	-	97,000	2,000	9,300	-	-	-	-	-	-	-	-	108,300	20 2,027	2,053
Arlington,	-	-	-	-	-	3,084	9,605	3,753	455	-	-	-	-	-	-	-	168,208	12 4,038	-
Athletorough,	-	900	2,000	-	-	13,373	18,769	18,769	550	2,495	7,341	-	-	-	1,400	-	32,045	6 385	975
Bay State,	-	-	-	10,005	-	15,040	6,550	215,914	22,243	28,422	68,112	-	-	-	3,341	-	493,233	129 2,173	4,948
Beverly,	-	-	-	2,291	-	192,878	104,980	12,100	2,400	100	-	-	-	-	-	-	1,642	12 2,100	14,150
Boston,	1,150	2,247	453	2,922	-	33,721	10,283	12,100	2,400	100	-	-	-	-	-	-	277,939	52 3,579	7,039
Brookline,	7,171	12,460	4,006	5,260	-	120,710	62,500	34,030	10,367	8,750	1,120	900	-	-	-	-	204,358	38 3,713	700
Cambridge,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233,570	41 1,250	250
Charlestown,	-	3,300	12,083	-	-	132,501	24,764	16,920	5,773	2,584	5,531	301	-	-	-	-	18,480	3 3,640	-
Chelsea,	-	-	6,480	-	-	95,000	52,800	26,400	52,800	1,000	-	-	-	-	-	-	6,630	1 320	-
Crofton,	-	2,640	6,280	-	-	2,500	2,640	2,640	-	-	-	-	-	-	-	-	422,773	4 1,653	-
Crofton Falls,	1,600	-	-	-	250	-	1,700	8,000	9,000	1,023	-	-	-	-	-	-	-	48	-
Citizens' (Lynn),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	420	-
Citizens' (Quincy),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 345	-
Citizens' (Wakefield),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 4,076	000
Clinton,	-	850	850	-	-	7,675	6,450	5,500	-	1,250	-	1,000	-	-	-	-	291,718	40 2,008	9,234
Cottage City,	-	-	-	3,003	-	7,232	5,005	2,013	975	-	-	-	-	-	-	-	103,104	10 2,784	4,420
Danvers,	-	-	-	6,032	-	25,000	8,583	18,051	-	8,100	-	-	-	-	-	-	19,250	3 3,410	9,052
Dedham,	-	2,913	3,402	2,100	-	133,300	78,100	25,700	7,800	8,100	4,000	-	-	-	-	-	100,160	18 5,120	2,400
Dorchester,	600	-	-	2,400	-	49,000	35,058	4,400	5,400	950	-	-	-	-	-	-	60,300	11 1,220	-
Dorchester,	-	-	-	8,400	-	2,600	7,100	500	-	-	-	-	-	-	-	-	27,291	6 801	2,020
Dorchester,	-	604	812	4,000	-	28,825	4,380	40,086	21,083	1,500	200	-	-	2,200	-	-	29,191	1 2,040	1,320
Fall River,	-	-	-	4,000	-	41,190	4,000	5,400	5,000	-	-	-	-	-	-	-	7,920	1 2,040	1,320
Fitchburg,	-	-	-	9,370	-	10,400	5,421	2,100	-	-	-	-	-	-	-	-	28,931	4 3,731	4,563
Gardner,	-	-	750	-	-	19,341	6,700	1,200	1,000	-	-	-	-	-	-	-	80,945	16 1,743	1,818
Gloucester,	-	1,320	2,640	5,050	-	13,421	2,640	2,640	200	-	-	-	-	-	-	-	81,333	15 2,133	1,001
Great Barrington,	-	-	6,050	7,220	-	44,362	4,800	17,040	-	4,025	-	-	-	-	-	-	14,700	2 1,440	100
Haverhill,	-	-	7,220	4,800	-	44,362	4,800	17,040	-	4,025	-	-	-	-	-	-	138,126	26 840	3,078
Holyoke,	-	-	1,815	10,178	-	41,036	10,178	11,804	5,150	-	-	-	-	-	-	-	141,130	27 1,120	3,504
Lawrence,	2,100	300	10,360	14,187	-	960	1,000	1,000	-	-	-	-	-	-	-	-	7,000	4 0 2,640	1,524
Leicester,	-	-	975	7,125	-	75,561	29,112	14,187	10,575	591	-	-	-	-	-	-	138,126	26 840	3,078
Leicester,	-	-	-	2,000	-	92,885	6,226	23,722	8,112	2,028	9,103	-	-	-	-	-	141,130	27 1,120	3,504
Leicester,	-	-	-	-	-	1,600	4,000	-	-	-	-	-	-	-	-	-	7,000	4 0 2,640	1,524
Leicester,	1,200	1,600	1,810	7,000	1,114	-	1,500	500	-	-	-	-	-	-	-	-	14,124	2 3,361	-

Lowell,	2,281	2,409	—	485	96,806	—	78,603	70,645	72,404	8,223	7,516	6,681	1,000	348	1,575	3,471	15,355,364	67	1,804	10,394
Lynn,	837	—	—	2,375	4,625	—	135,087	73,920	43,220	3,337	4,562	4,600	—	—	—	—	135,611	25	3,611	18,153
Malden,	—	—	—	—	—	—	135,000	—	—	—	1,800	—	—	—	—	—	263,940	44	2,640	12,562
Manufacturers' (Fall River),	345	450	—	540	2,596	—	6,583	2,733	3,440	—	—	—	—	—	—	—	—	43	847	—
Marblehead,	—	—	—	1,200	969	—	6,578	2,000	2,680	—	—	—	—	—	—	—	16,687	2	2,807	1,100
Marlborough,	—	564	—	—	4,420	—	7,920	5,280	1,320	—	—	—	—	—	—	—	13,427	2	847	—
Middleborough,	—	—	—	600	3,740	—	8,500	9,000	13,000	—	—	—	—	—	—	—	19,504	3	3,664	1,290
Millis,	1,200	—	—	600	1,200	—	4,200	1,000	5,000	—	—	—	—	—	—	—	36,000	6	4,320	—
Miller's River (Athol),	2,300	1,100	—	—	—	500	8,093	—	1,325	—	—	—	—	—	—	—	15,400	2	4,840	1,800
Mutual (Southbridge),	—	—	—	1,320	5,280	—	8,093	—	1,325	—	—	—	—	—	—	—	9,920	1	4,840	—
Nantucket,	—	—	—	—	—	—	2,640	15,840	500	—	—	—	—	—	—	—	25,580	4	4,400	—
Natick,	—	—	—	222	13,640	—	1,770	3,030	—	—	—	—	—	—	—	—	18,662	3	2,822	300
New Bedford,	—	—	—	795	—	—	89,549	21,974	—	5,289	—	3,005	—	—	—	—	144,310	27	1,950	2,029
Newburyport,	—	—	—	—	4,752	—	22,704	5,280	7,920	1,320	3,960	—	—	—	—	—	45,936	8	3,696	4,752
Newton,	—	—	—	—	17,000	—	146,715	103,555	17,350	1,200	19,050	2,400	—	—	—	—	307,270	58	1,030	9,175
North Adams,	—	—	—	—	16,240	—	12,520	16,040	5,280	—	640	—	—	—	—	—	50,780	9	3,260	1,300
Northampton,	—	—	—	—	5,280	—	11,210	23,760	1,000	1,400	—	—	—	—	—	—	45,290	8	3,050	650
North Attleborough,	52	2,640	—	211	5,800	—	6,020	25,000	6,000	2,500	—	—	—	—	—	—	45,583	8	3,343	—
Norwood,	—	—	—	—	800	—	—	12,571	8,839	—	500	—	—	—	—	—	22,310	4	1,190	800
Pittsfield,	—	—	—	400	1,750	—	25,000	5,800	4,750	—	—	—	—	—	—	—	40,200	7	2,240	1,050
Plymouth,	—	—	—	—	2,663	—	8,500	5,325	2,000	—	—	—	—	—	—	—	18,488	3	2,648	2,825
Roxbury,	—	—	—	—	—	—	235,548	38,680	60,483	3,745	—	—	—	—	—	—	362,238	68	3,198	12,704
Salem,	—	—	—	885	20,492	—	38,458	33,654	24,693	1,919	5,214	5,738	—	1,569	—	—	134,313	25	2,313	2,175
South Boston,	—	—	—	537	287	—	95,307	8,814	28,811	6,800	803	499	—	3,260	—	—	141,858	26	4,578	1,536
Spencer,	—	—	—	2,546	19,638	—	16,052	5,015	—	—	—	—	—	—	—	—	54,564	10	1,764	4,068
Springfield,	8,766	2,647	—	2,835	9,953	—	69,727	64,320	32,101	3,030	5,507	3,050	—	5,250	—	—	195,773	37	413	8,757
Taunton,	—	—	—	—	900	—	49,892	10,450	24,992	7,200	600	600	—	—	—	—	94,734	17	4,974	4,834
Waltham,	—	—	—	—	—	—	41,664	17,574	12,679	1,500	1,460	—	—	—	—	—	79,571	15	371	2,718
Ware,	35	325	—	425	3,909	—	—	2,881	2,881	—	—	—	—	—	—	—	11,293	2	643	300
Webster,	—	—	—	—	11,448	—	7,920	—	5,280	—	—	—	—	—	—	—	13,200	2	2,640	—
Westfield,	—	—	—	—	7,894	—	13,826	3,631	2,575	2,073	—	—	—	—	—	—	27,621	5	1,221	750
Woburn,	—	—	—	500	6,014	—	13,826	5,855	2,325	1,430	—	—	—	—	—	—	29,950	5	3,550	5,500
Worcester,	9,217	3,704	—	4,326	4,881	—	74,044	40,324	49,275	6,420	536	—	—	4,037	2,335	—	201,950	38	1,310	14,505
Total,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,258	687

1 Includes 15,138 feet of 30-inch main.

2 Includes 27,384 feet of 18-inch main and 17,158 feet of 30-inch main.

3 Includes 5,326 feet of 18-inch main.

4 Approximate.

5 Includes 2,800 feet of 5-inch main.

METERS.

All of the companies make returns this year of the number of meters ; although one, the Citizens' Gas Light Company of Quincy, does not give the detailed statement.

There has been an increase during the year of 5,928 meters and 41,901 lights, as represented by the nominal capacity of the meters.

The following table shows the number of meters of each size in use by the various companies June 30, 1888.

Boldface figures show decrease.

HIGH-POWER GAS LAMPS.

The following table shows the number of Lungren or other high-power gas lamps in use June 30, 1888 : —

Adams,	32	Manufacturers' (Fall River),	5
Amesbury,	2	Marblehead, { Lungren,	1
Attleborough,	6	{ Albo-carbon,	50
Beverly,	19	Marlborough,	13
Boston (not known),	—	Milford,	107
Brockton,	24	Miller's River (Athol),	6
Brookline,	1	Natick,	28
Cambridge,	135	New Bedford,	37
Chelsea,	25	Newburyport,	5
Chicopee,	2	Newton,	83
Citizens' (Quincy),	1	North Adams,	120
Clinton,	8	Northampton,	22
Dedham,	1	North Attleborough,	46
Dorchester,	6	Pittsfield,	7
East Boston,	120	Plymouth,	73
Fall River,	58	Roxbury (not known),	—
Fitchburg,	20	Salem,	4
Gloucester,	8	South Boston,	10
Greenfield,	21	Springfield,	27
Haverhill,	45	Taunton,	80
Jamaica Plain,	2	Waltham,	37
Lawrence,	239	Webster,	1
Leominster,	1	Westfield,	20
Lowell,	39	Woburn,	11
Lynn,	17	Worcester,	12
Malden,	162		

GAS STOVES.

But little can be said in addition to last year's report on this subject. The companies mentioned then as having more than 100 stoves in use had on June 30 last received no addition to their number.

Of the companies then named, Lawrence gained during the year 15 stoves; New Bedford, 82; Springfield, about 200; and Waltham, 23. Lowell made an apparent increase of over 1,200, but this was due to an accurate count of the stoves in use, made during the summer by the meter takers.

The Citizens' Steam and Gas Light Company of Lynn, selling non-luminous fuel water gas, report 105 stoves in use June 30.

PUBLIC LAMPS.

The number of public gas lamps shows, as last year, a decrease from the number in use the year previous. Compared with the re-

turns for the year ending June 30, 1887, there was a net loss to the coal-gas companies of 636 lamps, and to the oil-gas companies of 29. This makes the loss during the two years, from July 1, 1886, to June 30, 1888, 1,727 coal-gas and 31 oil-gas lamps, due entirely to the growth of electric street lighting. These figures, however, do not show the number of public gas lamps displaced by electric lights; for in most places the increased use of gas lamps on the outskirts of the town makes up in a large measure for those displaced in the centre by electric lights.

The following table shows the number of lamps supplied June 30, 1888, the net increase or decrease during the year, the average price per thousand feet received from gas used in street lamps, and also the cost per thousand of the care of the lamps, when this is done by the companies.

Public Lamps — Coal Gas.

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average price re- ceived per M.	Expense of Lighting and Care of Lamps per M.
		Increase.	Decrease.		
Adams,	63	—	—	\$2.0160	—
Amesbury,	10	10	—	0.9600	\$0.2150
Arlington,	60	—	87	2.7500	—
Beverly,	52	—	1	2.4000	.0018
Boston,	3,554	94	—	1.2584	—
Brockton,	—	—	43	—	—
Brookline,	806	47	—	2.1286	.2406
Cambridge,	953	—	8	1.5158	—
Charlestown,	953	—	56	1.7138	—
Chelsea,	530	17	—	2.0000	—
Chicopee,	6	—	69	2.5942	—
Citizens' (Quincy),	129	6	—	1.5816	.3322
Citizens' (Wakefield),	85	—	—	3.0397	—
Clinton,	6	—	—	2.4998	—
Cottage City,	11	—	4	—	—
Dedham,	108	3	—	3.4819	.5675
Dorchester,	1,269	61	—	2.0000	—
East Boston,	722	21	—	1.7500	—
Easthampton,	56	—	—	2.4000	—
Fall River,	360	40	—	1.4925	—
Fitchburg,	66	—	1	1.5940	—
Gloucester,	99	2	—	1.8000	.0107
Greenfield,	6	—	—	2.2260	—
Haverhill,	228	—	91	1.4015	—
Holyoke,	74	—	9	1.4550	—

Not separated from gas sold by meter.

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average price re- ceived per M.	Expense of Lighting and Care of Lamps per M.
		Increase.	Decrease.		
Jamaica Plain,	713	144	—	\$2 0000	—
Lowell,	854	96	—	1.1788	—
Lynn,	278	—	12	1.7815	—
Malden,	159	—	233	2.0224	\$0.2583
Manufacturers' (Fall River),	100	6	—	1.5000	—
Marblehead,	73	6	—	3.7359	.9349
Marlborough,	11	—	2	2.0630	—
Milford,	39	—	22	2.0000	.6293
Miller's River (Athol), . .	54	6	—	2.4705	.5670
Nantucket,	72	—	—	2.1059	.3539
Natick,	17	—	—	2.2832	—
New Bedford,	457	17	—	1.5328	.4038
Newburyport,	—	—	150	—	—
Newton,	771	—	41	2 2090	.6795
North Adams,	107	7	—	1.3455	.3268
Pittsfield,	70	—	—	2.0322	.4896
Plymouth,	43	2	—	2.4874	.8074
Roxbury,	1,852	6	—	1.6250	—
Salem,	112	5	—	1.8000	.0146
South Boston,	795	—	11	1 6617	—
Springfield,	471	—	15	1.3730	—
Taunton,	163	1	—	1.6226	—
Waltham,	178	—	2	3.1462	.7578
Ware,	20	—	48	2.5634	—
Webster,	40	—	—	2.3426	—
Westfield,	16	—	18	2.2500	—
Woburn,	—	—	81	2.4000	—
Worcester,	614	—	30	1.5208	—
Total,	18,085				

Oil Gas.

Amherst,	36	11	—	\$6.0000	—
Chicopee Falls,	18	—	—	—	—
Leominster,	110	2	—	5 0000	—
Lexington,	85	—	—	4.0800	\$0.0271
Mutual (Southbridge), . .	1	—	42	3.0000	—
Total,	250				

PURITY OF GAS.

The law provides that when the gas of any company is found on three consecutive inspections to give less light than fifteen standard English candles, or to contain more than twenty grains of sulphur or ten grains of ammonia per hundred cubic feet of gas, or more than

ten per cent. of carbonic oxide or any sulphuretted hydrogen, a fine of one hundred dollars shall be paid by such company to the city or town supplied by it. (Pub. Stats., chap. 61, sect. 14.)

The following table shows the amount of impurities found on the given dates, and the whole number of inspections during the year, of the gas of the several companies therein named, as reported to this Board by the State Inspector of Gas.

Kind of Impurities.	NAME OF COMPANY.	Amount of Impurity.	DATE WHEN FOUND.	Total Number of Inspections during the Year.
Deficient candle-power.	Cottage City,	13.3	June 20,	2
Sulphur, grains per 100 cu. ft.,	Cambridge,	23.1	Dec. 27,	21
Ammonia, grains per 100 feet.	Chelsea,	13.3	May 11,	8
	Citizens' (Wakefield),	12.0	Nov. 21,	3
	Dorchester,	16.4	Oct. 25,	10
	"	76.0	Nov. 7,	-
	East Boston,	18.2	June 27,	8
	Easthampton,	13.2	Sept. 1,	2
	Fall River,	11.6	Mar. 1,	10
	"	25.4	Sept. 22,	-
	Gloucester,	22.2	Sept. 6,	4
	Haverhill,	14.2	Mar. 23,	8
	North Adams,	43.5	Dec. 27,	5
	North Attleborough,	14.3	Sept. 19,	4
	Roxbury,	16.7	June 1,	26
	"	12.2	June 21,	-
	"	25.0	Dec. 1,	-
	"	13.3	Dec. 19,	-
	South Boston,	15.6	June 6,	12
Sulphuretted hydrogen.	"	13.3	June 29,	-
	"	14.3	Sept. 18,	-
	"	15.0	Nov. 14,	-
	Taunton,	25.0	Nov. 7,	6
	Adams,	Trace,	Nov. 3,	3

Kind of Impurities.	NAME OF COMPANY.	Amount of Impurity.	DATE WHEN FOUND.	Total Number of Inspections during the Year.
Carbonic oxide, per cent. by volume,	Amesbury,	24.08	July 3,	2
	"	28.93	Oct. 17,	—
	Charlestown,	13.58	Sept. 21,	15
	Cottage City,	17.46	June 20,	2
	"	20.04	Oct. 12,	—
	Fall River,	12.73	Mar. 1,	10
	"	14.57	Mar. 20,	—
	"	10.18	July 10,	—
	"	11.68	Sept. 22,	—
	"	14.03	Oct. 19,	—
	"	18.12	Nov. 7,	—
	"	15.62	Nov. 28,	—
	"	12.38	Dec. 21,	—
	Miller's River (Athol),	30.00	Oct. 27,	2
	"	31.50	Dec. 29,	—
	Roxbury,	10.90	Feb. 17,	26
	"	10.96	Mar. 2,	—
	"	10.04	July 21,	—
	"	13.51	Oct. 13,	—
	Spencer,	12.63	Aug. 23,	3
	"	20.35	Nov. 1,	—
	"	18.98	Dec. 26,	—
	Worcester,	11.26	Mar. 8,	16

The inspections cited in the above table were consecutive in Dorchester, Amesbury, Athol, Cottage City and Spencer. The two of June 1 and 21 of Roxbury, for ammonia, and the two of February 17 and March 2, for carbonic oxide, at the same place, were also consecutive.

At Fall River, the first two for carbonic oxide were consecutive, then two inspections where less than 10 per cent. of carbonic oxide was present intervened, and the last six are again consecutive inspections.

A comparison of the inspections made in 1885, 1886, 1887 and 1888 shows the following results:—

	1885.	1886.	1887.	1888.
Number of inspections made, . . .	517	426	445	458
Number of companies subject to inspection,	56	58	59	60
Number of companies showing deficiency in candle-power, . . .	—	1	1	1
Highest candle-power, not including ten oil-gas companies,	26.0	24.0	23.3	21.6

	1885.	1886.	1887.	1888.
Lowest candle-power, not including ten oil-gas companies,	15.1	14.7	12.5	13.3
Average candle-power, not including ten oil-gas companies,	17.62	17.76	17.74	17.60
Number of companies showing sulphuretted hydrogen,	3	4	4	1
Number of companies showing excess of sulphur,	0	2	4	1
Number of companies showing excess of ammonia,	6	15	9	13
Number of companies showing excess of carbonic oxide,	3	4	4	8
Largest amount of sulphur,	19.1	29.2	25.2	23.1
Smallest amount of sulphur,	2.8	2.5	1.4	3.2
Average amount of sulphur,	9.93	19.42	8.81	9.26
Largest amount of ammonia,	36.4	58.7	43.4	76.0
Smallest amount of ammonia,	1.-	1.-	1.-	1.-
Average amount of ammonia,	3.21	4.05	3.29	3.07

The inspections of the ten oil-gas companies showed : —

	1885.	1886.	1887.	1888.
Highest candle-power,	61.3	58.6	59.7	52.4
Lowest candle-power,	20.0	23.0	22.1	21.5
Average candle-power,	30.60	30.35	30.36	33.73

PETITION OF ROXBURY CONSUMERS.

The following petition, signed by twenty-five consumers, was received by the Board April 9, 1888 : —

To the Board of Gas Commissioners for the State of Massachusetts.

GENTLEMEN : — The undersigned, citizens using gas furnished by the Roxbury Gas Light Company, feeling that we are paying too much for light, and having asked the company to reduce the price, without effect, petition your honorable body to have the price reduced, and would like an immediate hearing.

A hearing was fixed for May 22, at the office of the Board, and notice of the same was served upon the company and by newspaper publication. At the time appointed, representatives of the petitioners and the company were present : but, as the former were not prepared to proceed, the case was continued, without objection, to the tenth day of July. Pending this continuance, official notice was received from the company that the directors had reduced the price

from \$1.75 to \$1.60 per M. to the smallest consumers, and to \$1.50 to the city for street lamps.

On July 10 neither the petitioners nor any other citizens were present in aid of the petition.

In view of the evident loss of interest in the subject, and apparent satisfaction of the consumers with the action of the company, the further consideration of the petition was indefinitely postponed.

ACCIDENTS.

Section 2 of chapter 350 of the Acts of 1888 requires gas and electric-light companies to report in writing, within twenty-four hours, to the Board, every accident by gas or electricity which causes bodily injury, or renders an employee, a consumer or any other person insensible. The Act took effect the thirtieth day of June last. A copy of the Act, which may be found in the Appendix, was sent to each of the companies immediately after its passage.

Three cases have been reported by the companies, the facts in which are as follows:—

Leland B. Webber, age twenty-five, registered at Clark's Hotel, Boston, at 10 o'clock P.M. Nov. 29, 1888; thinks he probably retired about 11 o'clock. There being no response when he was called at 8.30 the next morning, an employee of the hotel entered the room through the transom, found the guest unconscious and apparently not breathing. The room was full of gas, which was escaping from two burners. A physician was called, and the man at once taken to the City Hospital, from which he was discharged December 6. The hotel room was nine feet long, eight feet wide and eight and one-half feet high, with one window, and a transom over the door, both of which were found closed. Mr. Webber, a young man of excellent character and habits, must have turned the gas on unconsciously, and probably while suffering from some temporary bewilderment of mind, as he has no knowledge or recollection of having done so.

George Staten, while tapping the main and laying a one and one-quarter inch service pipe in Salem, Nov. 30, 1888, was rendered insensible after breathing the gas about half an hour. A physician was called, and injected brandy in the arm, which quickly restored

consciousness. He was faint about twenty-five minutes, then taken home; felt stupid the next morning, but went to work.

Miss Clara Scott retired at 9 o'clock on the night of Dec. 24, 1888, at the Coleman House, Lynn, and, in turning off the gas, turned the shut-off too far, thus allowing the gas to escape. She was found between 9 and 10 o'clock the next morning, totally unconscious, in her bed. A physician was summoned, and after several hours succeeded in restoring the young lady to consciousness. She suffered somewhat for several days from the effects of inhaling the gas, but has entirely recovered. The room was twelve feet long, ten feet wide and nine feet high, with two loose-jointed doors, two windows, rather tight, and a transom, all closed. There was no ventilation except through the cracks about the windows and doors.

The Board, having learned of the following case through the newspapers, investigated the facts.

Patrick Hart, age about fifty-five, retired at the Shawmut House, Boston, a little past 11 o'clock at night, Dec. 20, 1888. He answered to a rap on his door at 12 o'clock the next day. At 9 in the evening he was called again, but no response. The door was forced open, room found full of gas, stop-cock open, the man partly dressed lying on the bed, feet and hands cold, scarcely breathing, no pulse perceptible. A physician injected brandy and applied bottles of hot water. An hour later the patient was sent to the City Hospital, where oxygen was administered, and consciousness restored in about three hours. Four days later he was improving, but still weak and confined to his bed. The gas was probably blown out, but at what hour could not be ascertained. Hart had no recollection of having been called at 12, as above stated, and could give no account of what occurred during the day, December 21. The room was seven and one-half feet square, eight feet high, with one door and a window. The burner was small and in good condition.

ELECTRIC LIGHT.

It is gratifying to report that at least four of the electric-light companies which were doing business under a charter obtained in another State, have during the last year reorganized and received charters in this Commonwealth; namely, the Boston Electric Light Company and Plymouth Electric Light Company, each retaining its former name; the Malden Electric Light Company, now the Malden Electric Company; and the Essex Electric Light and Power Company, now called the Haverhill Electric Company.

The other foreign companies engaged in the electric-lighting business here will doubtless find it essential, for the preservation of the privileges they are enjoying, that they reorganize under the general laws of this State.

Great activity has been shown in forming new companies, chiefly in the larger towns; and at present there are 78 companies, while in 1887 there were 56. One company, the Lenox Gas and Electric Company, has taken a charter for the right to supply both gas and electric light.

The form of annual return prescribed by the Board for electric-light companies may be found in the Appendix.

Much time and study were devoted to the preparation of this blank. The subject was new and technical, and the Commissioners were largely dependent upon electrical experts and those proficient in the business. The officers of the larger companies and of some of the smaller ones were called upon, and invited to aid the Board in its difficult and novel task. This assistance was cordially given, and the care and interest shown merit hearty acknowledgment.

The end sought was a blank adapted to the form of book-keeping in use, and one suitable for small as well as large companies, whatever the system or kind of light. The suggestions of the various officers and experts of the companies have been so closely followed in the technical portion of the inquiries, that much confidence is felt that the blank will prove satisfactory.

The following table gives the name, the year of incorporation, the State in which chartered, the location and the capital of the various electric-light companies doing business in this State : —

NAME OF COMPANY.	When organ- ized.	State in which chartered	LOCATION.	CAPITAL.
Adams Electric Light and Power Co.,	1887	Mass.,	Adams,	\$5,000
Andover Electric Light Co.,	1888	"	Andover,	20,000
Athol Electric Light and Power Co., .	1888	"	Athol,	15,000
Beverly Gas Light Co.,	1888 ¹	"	Beverly,	—
Boston Electric Light Co.,	1888	"	Boston,	870,000
Brookline Gas Light Co.,	1887	"	Brookline, Boston (Brighton district), .	—
Cambridge Electric Light Co.,	1886	"	Cambridge,	10,000
Charlestown Gas Co.,	1886 ²	"	Boston (Charlestown),	—
Chelsea Gas Light Co.,	1888 ³	"	Chelsea,	—
Chicopee Electric Light Co.,	1887	"	Chicopee,	10,000
Citizens' Electric Light Co.,	1888	"	Fall River,	—
Citizens' Electric Co.,	1888	"	Webster,	10,000
Cottage City Gas Co.,	1885 ²	"	Cottage City,	—
Dedham Electric Light Co.,	1888	"	Dedham,	25,000
Easthampton Electric Light Co., . . .	1888 ³	"	Easthampton,	10,000
Edison Electric Illuminating Co. of Boston,	1885	"	Boston,	500,000
Edison Electric Illuminating Co. of Brockton,	1883	"	Brockton,	71,000
Edison Electric Illuminating Co. of Fall River,	1883	"	Fall River,	81,600
Edison Electric Illuminating Co. of Lawrence,	1882	"	Lawrence,	65,000
Edison Electric Illuminating Co. of New Bedford,	1884	"	New Bedford,	100,000
Electric Light and Patent Flooring Co.,	1886	"	Amesbury,	28,400
Everett Electric Light Co.,	1888	"	Everett,	10,000
Fall River Electric Light Co.,	1883	"	Fall River,	60,000
Framingham Electric Co.,	1888	"	Framingham,	100,000
Franklin Electric Light Co.,	1887	"	Franklin,	—
Franklin Electric Light Co.,	1886	Mass.,	Turner's Falls,	5,000
Gardner Electric Co.,	1888	"	Gardner,	15,000
Gloucester Electric Co.,	1888	"	Gloucester,	5,250
Greenfield Electric Light and Power Co.,	1886	"	Greenfield,	15,000
Great Barrington Electric Light Co., .	1888	"	Great Barrington, . . .	16,000
Haverhill Electric Co.,	1888	"	Haverhill,	85,000
Holyoke Water Power Co.,	1888 ¹	"	Holyoke,	—
Hudson Electric Light Co.,	1886	Maine,	Hudson,	15,000
Hyde Park Electric Light Co.,	1888	Mass.,	Hyde Park,	25,000
Lawrence Gas Co.,	1887 ¹	"	Lawrence,	—
Lee Electric Co.,	1888	"	Lee,	15,000
Leicester Electric Co.,	1887	"	Leicester,	4,000
Leominster Electric Light and Power Co.,	1888	"	Leominster,	30,000
Lenox Gas and Electric Co.,	1888	"	Lenox,	30,000
Lynn Gas and Electric Co.,	1888 ³	"	Lynn,	—
Malden Electric Co.,	1888	"	Malden,	30,000
Marlborough Schuyler Electric Light Co.,	1886	"	Marlborough,	30,000

¹ Date of permission to engage in the business granted by the Board.

² Date of permission to engage in the business granted by the Legislature.

³ Sold out.

⁴ Not chartered.

⁵ Date of consolidation of Gas and Electric Light Companies under Act of the Legislature.

NAME OF COMPANY.	When organ- ized.	State in which chartered	LOCATION.	CAPITAL.
Medford Electric Light Co., . . .	1888	Mass.,	Medford, . . .	\$20,000
Middlesex Electric Light Co., . . .	1883	Maine,	Lowell, . . .	130,630
Milford Electric Light and Power Co.,	1886	Mass.,	Milford, . . .	40,000
Millbury Electric Co., . . .	1887	"	Millbury, . . .	10,000
Nantucket Electric Light Co., . . .	1888	"	Nantucket, . . .	12,000
Natick Electric Co., . . .	1886	Maine,	Natick, . . .	14,800
New Bedford Gas Light Co., . . .	1888 ¹	Mass.,	New Bedford, . . .	-
Newburyport Electric Light and Power Co., . . .	1887	"	Newburyport, . . .	28,300
Newton and Watertown Gas Light Co.,	1888 ¹	"	Newton, . . .	-
North Adams Electric Light and Power Co., . . .	1885	"	North Adams, . . .	7,500
Northampton Electric Lighting Co., .	1886	"	Northampton, . . .	51,300
North Attleborough Steam and Elec- tric Co., . . .	1886	"	North Attleborough, . .	30,000
North Shore Electric Co., . . .	1888	"	Revere, . . .	50,000
Orange Electric Light Co., . . .	1887	"	Orange, . . .	10,000
Palmer Electric Co., . . .	1887	"	Palmer, . . .	30,000
People's Electric Co., . . .	1888	"	Easthampton, . . .	5,000
Pittsfield Electric Light Co., . . .	1885	"	Pittsfield, . . .	5,000
Pittsfield Illuminating Co., . . .	1887	"	Pittsfield, . . .	25,000
Plymouth Electric Light Co., . . .	1888	"	Plymouth, . . .	30,000
Quincy Electric Light and Power Co.,	1888	"	Quincy, . . .	35,000
Rockland Electric Light and Power Co., . . .	1888	"	Rockland, . . .	15,000
Salem Electric Lighting Co., . . .	1882	"	Salem, . . .	70,000
Somerville Electric Light Co., . . .	1887	"	Somerville, . . .	80,000
Southbridge Electric Co., . . .	1887	"	Southbridge, . . .	15,000
South Hadley Falls Electric Light Co.,	1888	"	South Hadley Falls, .	7,000
Spencer Gas Co., . . .	1886	"	Spencer, . . .	-
Stoneham and Wakefield Electric Light and Power Co., . . .	1888	"	Stoneham, . . .	25,000
Taunton Electric Lighting Co., . . .	1882	"	Taunton, . . .	20,000
United Electric Light Co., . . .	1887	"	Springfield, . . .	150,000
Wachusett Electric Light Co., . . .	1883	Maine,	Fitchburg, . . .	100,000
Wakefield Electric Light and Power Co., . . .	1888	Mass.,	Wakefield, . . .	10,000
Waltham Gas Light Co., . . .	1886 ²	"	Waltham, . . .	-
Walworth Light and Power Co., . . .	1888	"	Boston, . . .	15,000
Ware Electric Light Co., . . .	1887	"	Ware, . . .	15,000
Westborough Electric Light and Power Co., . . .	1886	Maine,	Westborough, . . .	-
Westfield Gas Light Co., . . .	1887 ¹	Mass.,	Westfield, . . .	-
Whitman Electric Co., . . .	1888	"	Whitman, . . .	20,000
Winchester Electric Light Co., . . .	1888	"	Winchester, . . .	10,000
Williamstown Electric Light Co., . .	1888	"	Williamstown, . . .	15,000
Woburn Electric Light Co., . . .	1888	"	Woburn, . . .	60,000
Worcester Electric Light Co., . . .	1883	"	Worcester, . . .	100,000

¹ Date of permission to engage in the business granted by the Board.² Date of unanimous consent of the stockholders allowing company to engage in the business.

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value at par of the stock in the State on June 30, 1888 : —

NAME OF COMPANY.	Whole number of Stockholders.	Number resi- dent in Massachusetts.	Value of Stock held in Massachusetts.
Beverly,	4	4	\$8,000
Boston,	260	123	302,400
Cambridge,	20	20	100,000
Chicopee,	6	6	10,000
Edison (Boston),	35	14	95,100
Edison (Brockton),	21	18	45,450
Edison (Fall River),	61	55	60,100
Edison (Lawrence),	16	13	45,375
Edison (New Bedford),	99	98	81,000
E. L. and Patent Flooring (Amesbury),	15	13	26,500
Fall River,	39	33	44,400
Framingham,	4	4	100,000
Franklin (Turner's Falls),	23	23	5,000
Gardner,	20	20	15,000
Gloucester,	8	8	5,250
Great Barrington,	16	8	5,800
Greenfield,	39	37	14,000
Holyoke,	3	3	30,000
Hudson,	14	14	6,025
Leicester,	12	12	4,000
Lynn,	21	21	75,000
Malden,	10	10	30,000
Marlborough,	13	10	18,000
Middlesex (Lowell),	443	420	127,230
Milford,	19	19	39,300
Millbury,	24	24	10,000
Natick,	17	17	14,800
Newburyport,	41	39	26,100
Newton,	28	28	48,500
Northampton,	66	66	51,300
North Adams,	10	10	7,500
North Attleborough,	13	12	26,500
Pittsfield E. L. Co.,	4	4	5,000
Pittsfield Ill. Co.,	4	3	15,000
Plymouth,	6	6	25,000
Quincy,	67	67	—
Salem,	61	59	66,900
Somerville,	112	110	79,200
Southbridge,	15	15	15,000
Taunton,	34	33	19,500
United (Springfield),	37	37	150,000
Wachusett (Fitchburg),	59	52	97,930
Webster,	14	14	10,000
Woburn,	—	—	21,000
Worcester,	88	85	99,100

The following table shows the systems used, the maximum dynamo capacity and nominal candle-power of the lamps of each company, June 30, 1888 : —

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
Beverly,	Thomson-Houston,	35	2,000
Boston,	{ Brush, American,	2,313	2,000
	{ Thomson-Houston,		
	{ Thomson-Houston, West- ton, Sun,	3,025	16
Brookline,	{ American, Thomson- Houston,	220	2,000
	{ American, Thomson- Houston,	100	1,200
	{ Weston,	300	16
Cambridge,	{ Thomson-Houston,	100	2,000
	{ United States,	90	1,200
Charlestown,	Brush,	300	16
Chicopee,	Thomson-Houston,	180	2,000
Clinton,	Thomson-Houston,	50	1,200
Cottage City,	Schuyler,	90	1,200
Edison (Boston),	Ball,	60	1,600
Edison (Brockton),	Edison,	16,400	16
	{ Thomson-Houston,	110	2,000
	{ Edison,	2,200	16
Edison (Fall River),	{ Edison Municipal,	880	15
	{ Edison,	3,360	16
Edison (Lawrence),	{ American,	50	2,000
	{ Edison,	4,000	16
	{ Edison Municipal,	1,250	16
Edison (New Bedford),	Edison,	5,440	16
Electric Light and Patent Flooring Co. (Amesbury),	Thomson-Houston,	90	1,200
		75	2,000
Essex (Haverhill),	Thomson-Houston,	95	1,200
		800	16
Fall River,	Thomson-Houston,	50	2,000
		176	1,200
Framingham,	Thomson-Houston,	90	1,200
		500	16
Franklin (Franklin),	Thomson-Houston,	60	1,200
Franklin (Turner's Falls),	Thomson-Houston,	30	2,000
Gloucester,	Thomson-Houston,	88	1,200
Great Barrington,	Edison,	500	16
Greenfield,	Thomson-Houston,	45	1,200
		1,000	16
Holyoke,	Schuyler,	381	2,000
Hudson,	Thomson-Houston,	45	1,200
		200	16
Lawrence,	Thomson-Houston,	150	2,000
Leicester,	Thomson-Houston,	200	16
Lynn,	Thomson-Houston,	270	2,000
		500	16

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
Marlborough,	Schuyler,	45	1,200
		55	2,000
Middlesex (Lowell), . .	Thomson-Houston, . .	420	2,000
		600	16
Milford,	{ Thomson-Houston, . .	145	1,200
	{	500	16
	{ Brush-Swan,	300	16
Millbury,	Thomson-Houston, . .	50	1,200
Natick,	Thomson-Houston, . .	83	1,200
		800	16
New Bedford,	{ Thomson-Houston, . .	192	2,000
	{ Westinghouse,	1,300	16
Newburyport,	Thomson-Houston, . .	200	1,200
		400	16
Newton,	Thomson-Houston, . .	95	1,200
		1,000	16
Northampton,	Thomson-Houston, . .	140	1,200
		400	16
North Adams,	Thomson-Houston, . .	83	1,200
North Attleborough, . .	{ Schuyler,	280	1,200
	{ Thomson-Houston, . .		
Pittsfield E. L. Co., . .	Thomson-Houston, . .	95	1,200
Pittsfield Ill. Co., . .	Westinghouse,	1,950	16
Plymouth,	Ball,	50	1,600
Salem,	Thomson-Houston, . .	270	2,000
		800	16
Somerville,	American,	250	2,000
Southbridge,	Thomson-Houston, . .	100	1,200
Taunton,	{ Arnoux Hochhausen, .	50	2,000
	{ Brush,	300	16
United (Springfield), ¹ .	{ Thomson-Houston, . .	60	2,000
	{	166	1,200
	{ Westinghouse,	1,950	16
Wachusett (Fitchburg), .	Thomson-Houston, . .	130	2,000
		500	16
Waltham,	Thomson-Houston, . .	95	1,200
		400	20
Ware,	Thomson-Houston, . .	30	1,200
		500	16
Webster,	Thomson-Houston, . .	30	1,200
		200	16
Westfield,	Schuyler,	60	2,000
		50	1,200
Woburn,	{ Brush,	45	1,200
	{ Edison,	600	16
Worcester,	Thomson-Houston, . .	395	2,000
		800	20

¹ Motor generator in addition of 35 H. P.

The following table shows the number of boilers, their total rated horse-power, the number of engines, the total rated horse-power, and the number of dynamos of the different companies, on June 30 last, and the number of tons of coal used during the year ending on that day:—

NAME OF COMPANY.	Number of Boilers.	Total rated Horse-power.	Number of Engines.	Total rated Horse-power.	Number of Dynamos.	Coal used, Tons.
Beverly,	1	50	1	35	1	¹ 138
Boston,	20	2,425	28	2,279	75	15,106
Brookline,	3	375	6	360	7	² —
Cambridge,	3	375	3	305	5	1,150
Charlestown,	3	285	3	180	6	³ —
Chicopee,	1	100	1	65	1	⁴ —
Clinton,	1	75	1	75	2	⁴ —
Cottage City,	1	75	2	68	2	⁴ —
Edison (Boston),	9	1,500	11	1,445	22	2,290
Edison (Brockton),	4	390	5	475	10	⁴ —
Edison (Fall River),	3	284	3	310	6	⁴ —
Edison (Lawrence),	3	300	5	465	9	1,960
Edison (New Bedford),	3	375	4	425	8	⁵ 348½
Electric Light and Patent Flooring (Amesbury),	2	100	2	80	3	⁴ —
Essex (Haverhill),	3	300	2	250	6	⁴ —
Fall River,	2	200	3	160	6	550
Framingham,	1	120	2	185	4	⁴ —
Franklin (Franklin),	1	40	1	50	2	⁴ —
Franklin (Turner's Falls),	⁶ —	—	—	—	1	—
Gloucester,	1	60	1	48	2	⁴ —
Great Barrington,	1	95	1	80	2	—
Greenfield,	1	100	1	80	3	300
Holyoke,	⁷ —	—	—	—	14	—
Hudson,	1	80	1	60	2	⁸ 102
Lawrence,	2	300	2	400	3	⁹ 92
Leicester,	⁶ —	—	—	—	1	—
Lynn,	3	400	5	310	10	1,746
Marlborough,	1	85	1	60	3	195½
Middlesex (Lowell),	6	540	3	600	13	1,775¼
Milford,	2	160	2	120	4	900
Millbury,	¹⁰ —	—	1	35	1	—
Natick,	1	120	2	120	4	425
New Bedford,	3	300	4	250	8	¹¹ 261
Newburyport,	2	200	3	230	7	600
Newton,	2	250	2	130	4	¹² 185
Northampton,	2	180	2	195	4	¹³ 344
North Adams,	⁶ —	—	—	—	2	—

¹ 3,000 bushels coke used also.² 1,058½ chaldrons coke.³ 864 tons coke. Steam from same boilers used for water gas.⁴ Not returned.⁵ Dust and pea in addition, 706½ tons.⁶ Power leased.⁷ Water-power.⁸ Other fuel, 81 cords tan.⁹ Other fuel, 291 tons.¹⁰ Steam bought.¹¹ Dust, 29 tons, breeze, 5½ tons.¹² Dust, 370 tons.¹³ Wood, 58 cords.

NAME OF COMPANY.	Number of Boilers.	Total rated Horse-power.	Number of Engines.	Total rated Horse-power.	Number of Dynamos.	Coal used, Tons.
North Attleborough,	2	220	3	240	7	501
Pittsfield E. L. Co.,	1	—	—	—	2	—
Pittsfield Ill. Co.,	3	210	3	180	3	693
Plymouth,	1	60	1	60	2	2
Salem,	2	275	3	285	11	1,334
Somerville,	2	300	3	270	5	2
Southbridge,	1	60	1	60	2	183
Taunton,	2	120	1	65	4	2
United (Springfield),	3	—	3	375	10	—
Wachusett (Fitchburg),	2	180	2	150	8	686
Waltham,	1	156	2	110	4	4
Ware,	1	75	1	60	2	2
Webster,	1	80	1	50	2	2
Westfield,	1	80	1	80	3	142½
Woburn,	3	220	3	200	5	2
Worcester,	4	400	7	400	15	2,384

¹ Power leased.³ Steam bought.² Not returned.⁴ 25,242 bushels coke.

The following table shows in feet the total length of wire, the length of underground conduit, the length of the wires in the same, the number of poles set in streets or ways, and the length of streets, with overhead wires of each company, on June 30, 1888 : —

NAME OF COMPANY.	Total Length of Wire.	Length of Underground Conduit.	Length of Wires in Conduit.	Number of Poles set in Streets or Ways.	Length of Street with Overhead Wires.
	Feet.	Feet.	Feet.		Feet.
Beverly,	27,445	—	—	73	15,000
Boston,	1,882,940	—	—	616	—
Brookline,	191,200	—	—	—	—
Cambridge,	227,040	—	—	275	63,360
Charlestown,	207,000	—	—	75	—
Chicopee,	15,800	—	—	100	—
Clinton,	63,300	—	—	—	—
Cottage City,	—	—	—	40	—
Edison (Boston),	294,840	64,530	193,590	24	3,200
Edison (Brookton),	364,316	—	—	1,200	158,400
Edison (Fall River),	58,572	7,949	23,847	—	8,375
Edison (Lawrence),	454,987	7,000	41,347	1,100	316,800
Edison (New Bedford),	—	—	—	—	—
Electric Light and Patent Flooring Co. (Amesbury)	63,360	—	—	—	—

NAME OF COMPANY.	Total Length of Wire.	Length of Under- ground Conduit.	Length of Wires in Conduit.	Number of Poles set in Streets or Ways.	Length of Street with Overhead Wires.
	Feet.	Feet.	Feet.		Feet.
Essex (Haverhill), . . .	—	—	—	400	—
Fall River,	—	—	—	42	—
Framingham,	166,420	—	—	450	68,000
Franklin (Franklin), . . .	31,680	—	—	—	—
Franklin (Turner's Falls), .	10,000	—	—	70	7,000
Gloucester,	24,500	—	—	17	—
Great Barrington,	8,820	—	—	9	1,000
Holyoke,	178,200	—	—	534	105,600
Hudson,	18,400	—	—	45	6,700
Lawrence,	881,840	—	—	80	19,800
Lynn,	463,720	—	—	410	396,000
Malden,	—	—	—	1,200	—
Marlborough,	49,840	—	—	122	27,810
Middlesex (Lowell),	244,470	—	—	650	79,200
Milford,	71,000	—	—	175	20,000
Millbury,	45,860	—	—	163	22,830
Natick,	113,500	—	—	307	26,400
New Bedford,	196,290	—	—	260	51,480
Newburyport,	—	—	—	325	—
Newton,	301,000	—	—	600	100,000
Northampton,	252,426	—	—	—	—
North Adams,	24,000	—	—	50	18,000
North Attleborough,	280,780	—	—	560	27,500
Pittsfield E. L. Co.,	44,880	—	—	140	36,960
Pittsfield Ill. Co.,	77,651	—	47,100	94	16,995
Plymouth,	—	—	—	12	10,560
Salem,	190,900	—	—	533	79,800
Somerville,	381,000	—	—	1,000	175,000
Southbridge,	—	—	—	205	—
United (Springfield),	136,850	4,700	29,000	115	40,000
Wachusett (Fitchburg), . . .	106,500	—	—	125	50,000
Waltham,	75,450	—	—	150	17,950
Ware,	30,350	—	—	130	20,250
Webster,	26,400	—	—	100	—
Westfield,	38,799	—	—	137	28,837
Woburn,	70,000	—	—	—	—
Worcester,	—	—	—	714	67,350

The following table shows the number of motors furnished off arc and incandescent circuits, the number of single and double arc lamps, and the number of plain and copper-coated carbons used during the year : —

NAME OF COMPANY.	Number of Motors off Arc Circuits.	Number of Motors off Incandescent Circuits.	Horse-power of Motors.	Number of Single Arc Lamps.	Number of Double Arc Lamps.	Number of Plain Carbons used.	Number of Copper-coated Carbons used.
Beverly,	—	—	—	22	—	—	9,000
Boston,	40	—	53½	1,181	990	10,141	1,223,166
Brookline,	—	1	5	30	123	120,000	—
Cambridge,	—	—	—	25	109	—	—
Charlestown,	—	—	—	40	79	—	64,081
Chicopee,	—	—	—	42	—	16,000	8,000
Clinton,	—	—	—	70	—	—	—
Cottage City,	—	—	—	44	—	4,000	—
Edison (Boston),	—	104	352	—	—	—	—
Edison (Brockton),	—	11	38	88	—	—	—
Edison (Fall River),	—	11	14	—	—	—	—
Edison (Lawrence),	—	24	50	34	13	24,400	—
Edison (New Bedford),	—	20	27	—	—	—	—
Essex (Haverhill),	—	—	—	95	50	—	—
Fall River,	—	—	—	188	4	60,000	25,000
Framingham,	—	—	—	7	76	—	—
Franklin (Franklin),	—	—	—	26	—	9,000	2,000
Franklin (Turner's Falls),	—	—	—	—	—	3,600	7,400
Gloucester,	—	—	—	37	—	—	—
Greenfield,	—	—	—	33	—	12,000	—
Holyoke,	—	—	—	325	17	89,000	9,000
Hudson,	—	—	—	20	—	6,500	—
Lawrence,	—	—	—	85	24	10,000	8,000
Lynn,	—	—	—	121	119	—	130,000
Marlborough,	—	—	—	54	—	13,956	929
Middlesex (Lowell),	—	10	17½	328	62	—	183,500
Milford,	—	3	19½	58	—	25,000	—
Millbury,	—	—	—	39	—	10,000	500
Natick,	—	—	—	39	8	18,000	—
New Bedford,	—	—	—	130	32	—	20,000
Newburyport,	—	—	—	130	1	20,000	—
Newton,	—	—	—	—	77	30,000	—
Northampton,	—	—	—	—	—	—	2,000
North Adams,	—	—	—	58	2	16,000	—
North Attleborough,	3	—	5	172	—	1,680	52,500
Pittsfield Electric Light Co.,	—	—	—	59	8	18,500	—
Salem,	—	3	13	101	148	250	148,750
Somerville,	—	—	—	15	78	70,000	—
Southbridge,	—	—	—	87	4	—	—
Taunton,	—	—	—	50	—	—	—
United (Springfield),	—	6	19½	149	25	20,000	48,000
Wachusett (Fitchburg),	—	—	—	99	—	—	29,040
Waltham,	—	—	—	51	—	9,440	17,130
Ware,	—	—	—	20	—	1,680	—
Webster,	—	—	—	22	—	—	—
Westfield,	—	—	—	63	—	—	—
Worcester,	—	—	—	255	138	3,000	240,000

The following table shows the number of commercial lights of the different kinds, and the number of customers for each : —

NAME OF COMPANY.	Number of (Commercial) Arc Lights.	Nominal Candle-power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Commercial Incandescent Lights off Arc Circuits.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Consumers for both Arc and Incandescent Lights.
Beverly,	10	2,000	6	—	—	—	9	65	5	—
Boston,	1,124	2,000	279	1,229	16	81	2	32	40	27
Brookline,	34	2,000	24	80	16	9	5	125	—	—
Cambridge,	26	1,200	30	200	16	10	7	65	7	—
Charlestown,	45	2,000	13	—	—	—	38	32	40	—
Cottage City,	36	1,600	10	—	—	—	11	16	13	—
Edison (Boston),	67	2,000	70	19,918	16	500	4	65	—	—
Edison (Brockton),	—	—	—	2,084	10	—	54	—	1	—
Edison (Fall River),	—	—	—	5	16	—	12	20	—	—
Edison (Lawrence),	47	2,000	26	2,539	16	119	80	—	—	20
				2,841	16		—	—	—	

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle-power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Commercial Incandescent Lights off Arc Circuits.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights off Arc Circuits only.	Number of Consumers for both Arc and Incandescent Lights.
Edison (New Bedford),	-	1,200	-	4,287	16	300	-	20	-	-
Electric Light and Patent Flooring Co. (Amesbury),	-	-	-	-	-	-	-	7	-	-
Fall River,	155	1,200	-	-	-	-	-	13	-	-
Framingham,	15	1,200	30	600	16	45	-	8	1	4
Franklin (Franklin),	-	1,200	-	-	-	-	-	9	-	-
Franklin (Turner's Falls),	-	2,000	-	-	-	-	-	20	23	-
Gloucester,	22	1,200	7	-	-	-	-	32	1	2
Great Barrington,	-	-	-	-	-	-	-	15	-	-
Greenfield,	10	1,200	5	281	16	49	-	10	32	-
Holyoke,	203	2,000	70	750	10 to 32	70	-	65	-	-
Hudson,	9	1,200	8	210	16	16	-	17	4	-
Lawrence,	94	2,000	28	500	16	42	-	57	18	9
Lynn,	114	2,000	49	-	-	-	-	24	17	2
Marlborough,	-	2,000	16	-	-	-	-	65	4	10
Middlesex (Lowell),	29	1,200	-	-	-	-	-	65	-	2
Milford,	224	2,000	74	207	16	28	-	6	-	10
Millbury,	28	1,200	12	280	16	56	-	6	19	2
Natick,	18	-	-	-	-	-	-	20	-	-
New Bedford,	-	1,200	-	-	-	-	-	81	-	11
Newburyport,	11	2,000	-	450	16	36	-	32	-	2
Newton,	91	-	34	585	16	64	-	16	24	3
	-	1,200	12	945	16	57	-	-	-	-

Northampton,	33	1,200	12	347	20	62	—	6	—	65	—	6
North Adams,	58	1,200	23	—	—	—	—	4	8	32	—	5
	—	—	—	—	—	—	—	60	—	20	—	
	—	—	—	—	—	—	—	18	—	65	—	
North Attleborough,	50	1,200	7	—	—	—	—	147	48	32	—	10
	—	—	—	—	—	—	—	90	—	20	—	
Pittsfield E. L. Co.,	39	1,200	13	—	—	—	—	15	5	20 to 65	—	—
Pittsfield Ill. Co.,	104	2,000	21	1,680	16	154	—	45	15	65	—	8
Salem,	23	2,000	18	47	32	20	—	1	—	32	—	
	—	—	—	210	20	—	—	2	—	100	—	
Somerville,	—	—	—	—	—	—	—	3	23	60	—	8
	—	—	—	—	—	—	—	25	—	50	—	
Southbridge,	29	1,200	20	—	—	—	—	70	15	25	—	—
	19 ¹	2,000	—	—	—	—	—	32	—	16-32-65	—	
United (Springfield),	98	1,200	33	1,976	16	99	—	37	4	125	—	44
	—	—	—	—	—	—	—	21	—	65	—	
Wachusett (Fitchburg),	46	2,000	19	500	16	—	—	22	4	32	—	—
Waltham,	18	1,200	7	141	20	54	—	15	—	65	—	—
	—	—	—	—	—	44	—	43	25	65	—	—
Ware,	5	1,200	4	187	20	—	—	6	—	32	—	—
Webster,	15	1,200	7	—	—	31	—	2	3	65	—	—
Westfield,	5	2,000	—	155	20	43	—	2	2	32	—	—
Woburn,	26	1,200	17	—	—	—	—	2	19	65	—	1
Worcester,	255	2,000	70	800	10 to 50	—	—	17	—	25 to 75	—	—
	—	—	—	538	20	41	—	—	—	—	—	—

¹ Including 17 lamps owned by Boston and Albany Railroad Company, operated by this company.

The following table gives the number of public lamps, their candle-power, the number of hours burnt per night, the number of hours per month, and the price paid per night: —

NAME OF COMPANY.	Number Public Lamps.	Nominal Candle-power.	Number Hours per Night.	Number Nights per Month.	Price per Night.
Beverly,	19	2,000	Till midnight,	Every night, . . .	1 \$0.65
Boston,	607	2,000	8 to 12 hours, . .	"	{ Average 0.1125
	24	125	—	—	
	22	65	—	—	
	7	32	—	—	
Brookline,	75	2,000	Dark to daylight, .	Every night, . . .	0.50
	30	1,200	—	—	
	3	65	—	—	0.25
Cambridge,	103	2,000	Av. 10½ hours,	Every night, . . .	0.50
Charlestown,	70	2,000	"	"	0.65
Chicopee,	42	1,200	Av. 6 hours, . . .	Av. 23 nights, . .	Abt. 0.26½
Clinton,	30	1,200	—	—	Abt. 0.28
Cottage City,	8	1,600	6 hours,	Every night, . . .	Abt. 0.62
	25	2,000	"	"	0.42
Edison (Brockton),	29	30	"	20 nights, . . .	0.092
	22	20	"	"	0.075
	422	15	"	"	0.0665
Edison (Lawrence),	2	32	Dark to daylight,	Every night, . . .	0.1775
	3	16	Dark to 11.30,	"	0.0616
	124	16	Dark to daylight,	"	0.0887
	437	10	Dark to 11.30,	"	0.0328
Electric Light and Patent Flooring Co. (Amesbury),	49	1,200	Dark to 12 o'clock,	Dark nights, . . .	Abt. 0.25
Essex (Haverhill),	—	2,000	Dark to 1 A M.,	Av. 25 nights, . .	0.47
Fall River,	37	2,000	All night,	Every night, . . .	Abt. 0.56½
Frammingham,	58	1,200	Dark to 12.30, . .	"	0.27½
Franklin (Franklin),	25	1,200	Dark to 12, . . .	Every dark night, .	3

Franklin ("Turner's Falls"),	.	.	.	.	.	18	2,000	Dark to 12.30,	.	25 nights,	Abt. 0.32
Gloucester,	.	.	.	.	.	16	1,200	Dark to 12,	.	Every night,	Abt. 0.26 ¹
Greenfield,	.	.	.	.	.	21	1,200	5 hours,	.	20 nights,	Abt. 0.41 ²
Holyoke,	.	.	.	.	.	3	32	"	.	"	0.0416
Hudson,	.	.	.	.	.	102	2,000	All night,	.	"	0.50
Lawrence,	.	.	.	.	.	10	1,200	Dark to midnight,	.	Every night,	0.25
Lynn,	.	.	.	.	.	19	2,000	Dark to 12.20,	.	"	0.33 ³
Malden,	.	.	.	.	.	117	2,000	Dark to 1 A.M.,	.	"	0.47
Marlborough,	.	.	.	.	.	—	—	Dark to 12,	.	Moon schedule,	—
Middlesex (Lowell),	.	.	.	.	.	—	25	"	.	"	—
Millford,	.	.	.	.	.	24	2,000	"	.	Every night,	0.27 ⁴
Millbury,	.	.	.	.	.	152	2,000	All night,	.	"	0.50
Natick,	.	.	.	.	.	35	1,200	Dark to 11,	.	"	Abt. 0.27 ⁴
New Bedford,	.	.	.	.	.	21	1,200	6 hours,	.	"	0.22
Newburyport,	.	.	.	.	.	36	1,200	Dark to 12.30,	.	Moon schedule,	0.33 ⁴
Newton,	.	.	.	.	.	50	2,000	All night,	.	Av. 28 nights,	0.50
Northampton,	.	.	.	.	.	101	1,200	Av. 6 $\frac{1}{2}$ hours,	.	Every night,	0.22
North Attleborough,	.	.	.	.	.	76	1,200	All night,	.	420 nights,	0.50
Pittsfield Electric Light Co.,	.	.	.	.	.	81	25	"	.	"	0.06 ⁵
Plymouth,	.	.	.	.	.	88	1,200	Dark to midnight,	.	25 nights,	Abt. 0.20
Salem,	.	.	.	.	.	126	1,200	Dark to 12.30,	.	Moon schedule,	0.25
Somerville,	.	.	.	.	.	32	1,200	Av. 5 $\frac{1}{2}$ hours,	.	25 nights,	0.40
Southbridge,	.	.	.	.	.	32	1,600	6 hours,	.	"	0.45
Taunton,	.	.	.	.	.	145	2,000	All night,	.	Every night,	0.37
	.	.	.	.	.	77	2,000	Dark to 1 A.M.,	.	23 nights,	0.27
	.	.	.	.	.	44	1,200	Dark to 11.05,	.	21 nights,	0.50
	.	.	.	.	.	25	2,000	Dark to 12,	.		

¹ Contract entire for oil, gas and electric light.² Used for 80 nights in summer.³ \$80 per year.⁴ Plus extra dark nights.⁵ First 100 lights, \$0.47 each.⁶ \$75 per year. Reduction pro rata if lamps are used only 24 nights.⁷ Arlington, 20 nights, 210 25-candle-power lamps, \$80.96 $\frac{1}{2}$.⁸ Saturdays to 12 P.M.

NAME OF COMPANY.	Number Public Lamps.	Nominal Candle-power.	Number Hours per Night.	Number Nights per Month.	Price per Night.
United (Springfield), .	54	2,000	All night,	Every night, .	\$0.60
Wachusett (Fitchburg), .	52	2,000	Dark to 12, .	Moon schedule, .	₁
	31	1,200	Dark to 1 A.M.,	Every night, .	0.35
Waltham, .	-	65	"	"	0.12 ¹ ₂
	-	20	"	"	0.03 ¹ ₂
Ware, .	15	1,200	Dark to 12, .	24 or more nights, .	0.33 ¹ ₂
Webster, .	4	1,200	"	Every dark night, .	₁
Westfield, .	22	2,000	Dark to 1 A.M.,	Every night, .	0.23 ¹ ₂
Woburn, .	45	1,200	All night,	Moon schedule, .	₂
Worcester, .	138	2,000	"	Every night, .	0.55

¹ \$90 per year.² \$100 per year.

The following table shows the prices charged by the several electric-light companies for commercial lights on June 30, 1888: —

NAME OF COMPANY.	Price for Commercial Lights.
Beverly,	{ Arc lights, 50 cents per night used. Incandescent lights, 65 c. p. every night, \$5.00 per mo.; 32 c. p. every night, \$3.00 per mo.
Boston,	{ Arc lights under contracts, 1 lamp for 12 mos., 75 cents; for 6 mos., 80 cents; for 3 mos., 90 cents; 2 lamps for 12 mos., each 70 cents; for 6 mos., each 75 cents; for 3 mos., each 85 cents per day; 3 or 4 lamps, each 65 cents; for 6 mos., 70 cents; for 3 mos., each 80 cents per day; 5 to 7 lamps for 12 mos., each 60 cents; for 6 mos., each 65 cents; for 3 mos., each 75 cents per day; 8 or 9 lamps for 12 mos., 55 cents; for 6 mos., each 60 cents; for 3 mos., each 70 cents per day; 10 lamps for 12 mos., each 50 cents; for 6 mos., each 55 cents; for 3 mos., each 65 cents per day. Incandescent lights under contracts, 125 c. p. for 12 mos., each lamp 50 cents per day; 65 c. p. for 12 mos., each lamp 30 cents per day; 32 c. p. for 12 mos., each lamp 20 cents per day; 16 c. p., special rates varying from 1 1-5 to 3 cents per hour, based on average hours burned per day. Inside incandescent wiring charged to customer; lamps not broken by customer renewed free.
Brookline,	{ Arc lights, 8 cents per hour; contracts \$100.00 per year. Incandescent lights, \$1.00 to \$1.50 per month, 16 c. p. lamps.
Cambridge,	{ Arc lights, 6 days per week to 10 P.M., \$100.00 per year per lamp; 7 days per week, \$120.00 per year; 6 days per week to 12 P.M., \$120.00 per year; 7 days per week, \$140.00 per year. Incandescent lights, 16 c. p., 1 cent per hour; 32 c. p., \$24.00 to \$30.00 per year; 65 c. p., \$40.00 to \$48.00 per year.
Charlestown,	{ Arc lights, 50 cents to 75 cents per night. Incandescent lights, 50 cents per night per group of 8, 16 c. p. lamps. Wiring and lamp renewals at company's expense.
Cottage City,	{ Arc lights, for season of 80 nights, \$50.00 per lamp.
Edison (Boston),	{ Incandescent lights, 75 cents per 1,000 candle hours. Lamp renewals free; inside wiring charged to customer.
Edison (Brockton),	{ Arc lights, 4 nights per week, each lamp \$9.00 per month; 7 nights, \$10.00 per mo. Incandescent lights, \$0.0172 per 16 c. p. lamp hour. Lamp renewals free.
Edison (Fall River),	{ Incandescent lights, 1 1/4 cents per 16 c. p. lamp hour by meter. Inside wiring at net cost; renewals free.
Edison (Lawrence),	{ Arc lights, every night till midnight, \$10.00 per mo.; 6 nights per week, \$8.00 per mo.; 3 nights per week, \$7.00 per mo. Incandescent lights, 1 1/4 cents per 15 c. p. lamp hour by meter. Renewals free.
Edison (New Bedford),	{ Incandescent lights, 1 1/4 cents per 16 c. p. lamp hour. Renewals free.
Electric Light (Amesbury),	{ Arc lights, 3 nights per week, each lamp \$4.75 per mo.; 4 nights, \$5.25 per mo.; 5 nights, \$5.75 per mo.; 6 nights, \$6.25 per mo.; 7 nights, \$6.75 per mo. Incandescent lights, 3 nights per week, \$9.00 per year, and \$1.00 per year additional for each additional light per week.

NAME OF COMPANY.	Price for Commercial Lights.
Essex (Haverhill), . . .	{ Arc lights from \$100.00 per year to 50 cents per night, according to number of lights and constancy of use. Incandescent lights, \$1.00 to \$1.75 per mo., according to hours burned. Renewals free.
Fall River, . . .	{ Arc lights, \$8.00 per mo.
Framingham, . . .	{ Arc lights, 50 cents per light per night, or under contract, \$96.00 per year, burned during usual business hours. Incandescent lights, \$1.25 per mo. per 16 c. p. lamp for less than 5 lamps; \$1.00 per lamp per mo. for 5 or more lamps. Special rates for 20 or more. Other candle powers at 6½ cents per candle per month. Inside construction for stores, \$1.50 per lamp; for halls, etc., \$2.00 per lamp; for private houses, \$3.00 per lamp. Renewals free.
Franklin (Franklin), . .	{ Arc lights, \$75.00 per year.
Franklin (Turner's Falls),	{ Arc lights, \$75.00 per year, 4 nights per week.
Gloucester, . . .	{ Arc lights, \$8.00 to \$9.00 per mo. Incandescent lights, 65 c. p., \$3.00 to \$4.50 per mo. per lamp; 32 c. p., \$2.00 to \$3.00 per lamp per mo. Wiring and renewals free.
Great Barrington, . . .	{ Incandescent lights, \$10.00 per year per 16 c. p. lamp. Wiring free; lamps, 85 cents each.
Greenfield, . . .	{ Arc lights, \$100.00 per lamp per year. Incandescent lights, \$10.00 per lamp per year.
Holyoke, . . .	{ Arc lamps, for 3 nights per week till 10.30 P.M., \$70.00 per year; for 4 nights per week, \$75.00; for 6 nights per week until 11 P.M., \$100.00.
Hudson, . . .	{ Arc lights, \$6.25 per mo. Incandescent lights, 50 cents to \$1.25 per mo. Wiring and renewals free.
Lawrence, . . .	{ Arc lights, 3 nights per week, \$6.00 per lamp per mo.; 6 nights, \$8.00; 7 nights, \$10.00.
Lynn, . . .	{ Arc lights, \$7.50 to \$14.00 per lamp per mo. Incandescent lamps, \$1.00 to \$1.25 per lamp per mo. Renewals free.
Marlborough, . . .	{ Arc lights, for 1 lamp, \$9.50 per mo.; 2 or more, \$7.50 each per mo. Incandescent lights, \$9.00 per mo. for single group of 8 lights; \$8.00 per group for 2 or more groups. Interior construction and renewals free.
Middlesex (Lowell), . .	{ Arc lights, 50 cents per lamp per night until midnight. Incandescent lights, \$1.50 for 16 c. p. lamp per mo.
Milford, . . .	{ Arc lights, 3 nights per week until 9 P.M., \$5.55½ per lamp per mo.; 6 nights per week, \$6.66½; 7 nights per week until 11 P.M., \$10.00. Incandescent lights until 9 P.M., \$1.00 per lamp per mo.; until 11 P.M., \$1.25; all night, \$1.50. Inside construction and renewals free.
Millbury, . . .	{ Arc lights, \$80.00, or 12 cents per lamp per hour. Incandescent lights, 16 c. p., \$12.00 per year or 2 cents per hour per lamp; 32 c. p., \$25.00 per year or 4 cents per hour per lamp; 65 c. p., \$45.00 per year or 8 cents per hour. Inside wiring and renewals free.

NAME OF COMPANY.	Price for Commercial Lights.
Natick,	{ Arc lights, \$8.00 per mo. Incandescent lights, \$1.00 per mo. for 16 c. p. lamps, 7 nights per week; other lamps 6½ cents per candle per month; where used fewer nights per week, 1 cent per hour for 16 c. p. lamps. Inside wiring and renewals free.
New Bedford,	{ Arc lights, 50 cents per night for single light; 3 lamps to 11 P.M., \$1.00 per night. Incandescent lights, until 11 P.M., \$1.00 per lamp per mo.; until 9 P.M., 75 cents per lamp. Interior construction free; renewals, 65 cents.
Newburyport,	{ Arc lights, 7 nights per week, \$10.00 per mo. per lamp; 3 nights per week, \$7.00 per mo.; 2 nights, \$6.00. Incandescent lights, 65 c. p., 7 nights per week, \$5.00 per lamp per mo.; 2 nights, \$2.50 per mo.; 20 c. p., 7 nights, \$1.25; 3 nights, \$1.00 per night per lamp. Interior construction and renewals free.
Newton,	{ Incandescent lights, 1 cent per hour for 16 c. p. lamp. Interior wiring and renewals in stores free; elsewhere, at cost.
Northampton,	{ Arc lights, \$30.00 to \$75.00 per lamp per year. Incandescent lights, \$10.00 each per year. Interior construction and renewals free.
North Adams,	{ Arc lights, single lamp, 40 cents per night; 2 lamps, 36 cents each; 3 at 34 cents each; 4 at 33 cents; 5 at 32 cents each. Incandescent lights, 20 c. p. lamps, \$12.00 per year each; 65 c. p. lamp, 25 cents per night.
North Attleborough,	{ Arc lights, \$8.00 per lamp per mo., or 40 cents per night. Incandescent 20 c. p. lamps, \$1.25 each per mo.; 32 c. p., \$2.00 each per mo.; 65 c. p., \$4.00 per mo. Interior construction and renewals free.
Pittsfield E. L. Co.,	{ Arc lights, 6 nights per week, \$10.00 per lamp per mo.; 3 nights per week, \$7.00 per lamp per mo. Incandescent lights, 20 c. p. lamps, \$1.00 per mo. each; 65 c. p. lamps, \$3.00 per mo. each. Interior construction and renewals free.
Pittsfield Ill. Co.,	{ Incandescent lights, 3 evenings until 6.15, other evenings until 9 P.M., 10 c. p., 50 cents per mo. per lamp; 16 c. p., 75 cents; 25 c. p., \$1.20; 50 c. p., \$2.00. Until 9.15 every evening, 10 c. p., 60 cents per lamp per mo.; 16 c. p., 90 cents; 25 c. p., \$1.35; 50 c. p., \$2.50. Until 10.15 P.M., 10 c. p., 75 cents per lamp per mo.; 16 c. p., \$1.00; 25 c. p., \$1.50; 50 c. p., \$3.00. Until 11.30 P.M., 16 c. p., \$1.15 per lamp per mo.; 25 c. p., \$1.75; 50 c. p., \$3.50. First outfit of lamps free; 800 hours guaranteed life. Wiring and renewals paid by customer.
Plymouth,	{ Arc lights, 30 cents per lamp per night.
Salem,	{ Arc lights, 4 to 6 nights per week, yearly contract, until 10.30 P.M., \$12.00 per mo. per lamp; until midnight, \$15.60. On 6 mos. contract to 10.30 P.M., \$15.00 per mo. per lamp; until midnight, \$18.00. On 3 mos. contract to 10.30 P.M., \$17.00; to midnight, \$20.00. Incandescent lights, \$1.25 per mo. for 20 c. p. lamp. Interior construction, \$3.00 per lamp; renewals free.
Somerville,	{ Arc lights, \$100.00 per year for regular service; special rates for irregular service. Incandescent lights, 50 c. p., \$3.00 per lamp per mo.; 25 c. p., \$1.50 per lamp per mo. Interior construction paid by customer.

NAME OF COMPANY.	Price for Commercial Lights.
Southbridge, . . .	Arc lights, single lamp, \$80.00 per year for drug stores, \$70.00 elsewhere; 2 lamps, 10 per cent. discount; 3 or 4, 15 per cent. discount; 5 or more, special rates. Incandescent lights, 65 c. p., per lamp, \$40.00 per year; 32 c. p., \$25.00 per year. Interior construction and renewals free.
Taunton, . . .	Arc lights, average, \$10.00 per mo. Incandescent lights, \$1.00 per mo.
United (Springfield), . .	Arc lights, 35 cents to 75 cents per lamp per night. Incandescent lights. Rates per lamp per year for domestic lighting: 1st lamp, \$9.00; 2d, \$8.00; 3d, \$7.00; 4th, \$6.00; 5th, \$5.00; 6th, \$4.00; 7th and all others, \$3.00. Rates per lamp per year for business lighting until 6 P.M. ordinarily, and 10 P.M. 1 night per week: 10 c. p. lamps, \$5.50 each; 16 c. p., \$7.00; 25 c. p., \$9.25; 50 c. p., \$17.50; 100 c. p., \$33.50; 150 c. p., \$49.00. Until 6 P.M. ordinarily, and 10 P.M. 2 nights per week: 10 c. p. lamps, \$6.50 each; 16 c. p., \$8.00; 25 c. p., \$10.75; 50 c. p., \$20.00; 100 c. p., \$38.50; 150 c. p., \$56.00. Until 6 P.M. ordinarily, and 10 P.M. 3 nights per week: 10 c. p. lamps, \$7.50 each; 16 c. p., \$9.00; 25 c. p., \$12.00; 50 c. p., \$22.50; 100 c. p., \$43.25; 150 c. p., \$60.00. Until 8 P.M. ordinarily, and 12 P.M. 1 night per week: 10 c. p. lamps, \$8.00 each; 16 c. p., \$10.00; 25 c. p., \$13.25; 50 c. p., \$25.00; 100 c. p., \$48.00; 150 c. p., \$70.00. Until 10 P.M. every night: 10 c. p. lamps, \$9.00 each; 16 c. p., \$11.00; 25 c. p., \$14.75; 50 c. p., \$27.50; 100 c. p., \$52.75; 150 c. p., \$77.00. Until 12 P.M. every night: 10 c. p. lamps, \$10.00 each; 16 c. p., \$12.00; 25 c. p., \$16.00; 50 c. p., \$30.00; 100 c. p., \$57.50; 150 c. p., \$84.00. All night and every night: 10 c. p. lamps, \$13.00 each; 16 c. p., \$16.00; 25 c. p., \$21.25; 50 c. p., \$40.00; 100 c. p., \$76.75; 150 c. p., \$112.00. First outfit of lamps free; guaranteed life, 800 hours for 10, 16 and 25 c. p. lamps. Interior wiring, \$1.50 per lamp; renewals charged to customer.
Wachusett (Fitchburg), .	Arc lights. For stores closing 1 or 2 nights per week at 6 P.M.: for 1 lamp, \$10.80 per mo.; 2 or more lamps, \$10.00 each. For stores closing 3 nights per week at 6 P.M., \$10.00 per lamp per mo. For stores open 6 nights per week: 1 lamp \$12.00 per mo.; 2 or more, \$11.00 each. For stores open 7 nights per week: 1 lamp, \$13.00 per mo.; 2 or more, \$12.00 each. Incandescent lights. For stores closing 1 night per week at 6 P.M.: 10 c. p. lamps, each 75 cents per mo.; 16 c. p., 90 cents; 25 c. p., \$1.20; 50 c. p., \$2.25; 100 c. p., \$4.50. Series lamps, 32 c. p., \$2.50; 65 c. p., \$5.00 each. For stores closing 2 nights per week at 6 P.M.: 10 c. p. lamp, each 70 cents per mo.; 16 c. p., 85 cents; 25 c. p., \$1.15; 50 c. p., \$2.00; 100 c. p., \$4.00. Series lamps, 32 c. p., \$2.50; 65 c. p., \$5.00. For stores closing 3 nights per week at 6 P.M.: 10 c. p. lamps, each 65 cents; 16 c. p., 75 cents; 25 c. p., \$1.00; 50 c. p., \$1.75; 100 c. p., \$3.50. Series lamps, 32 c. p., \$2.50; 65 c. p., \$4.50. For stores open 6 nights per week: 10 c. p. lamp, each 85 cents per mo.; 16 c. p., \$1.00; 25 c. p., \$1.25; 50 c. p., \$2.50; 100 c. p., \$5.00. Series lamps, 32 c. p., \$3.00; 65 c. p., \$5.00. For stores open 7 nights per week: 10 c. p. lamps, each 90 cents per mo.; 16 c. p., \$1.10; 25 c. p., \$1.35; 50 c. p., \$2.75; 100 c. p., \$5.50. Series lamps, 32 c. p., \$3.00; 65 c. p., \$5.00 each. All night and every night: 10 c. p. lamps, each \$2.00 per mo.; 16 c. p., \$2.50; 25 c. p., \$3.75. One 16 c. p. lamp running all night, \$1.00 per mo. extra. Domestic lighting. Rates per year: 1 lamp, \$9.00; 2, \$17.00; 3, \$24.00; 4, \$30.00; 5, \$35.00; 6, \$39.00; 7, \$42.00; 8, \$44.00. Every additional lamp after the eighth, \$2.00 per year. Interior wiring, \$1.00 per lamp; renewals charged to customer. Guaranteed life of lamps, 600 hours.

NAME OF COMPANY.	Price for Commercial Lights.
Waltham,	Arc lights, 6 or 7 nights per week until 10 P.M., \$13.00; until 12 P.M., \$15.00; 4 or 5 nights per week until 10 P.M., \$11.00; until 12 P.M., \$13.00; 2 or 3 nights per week until 10 P.M., \$9.00; until 12 P.M., \$11.00. Prices given are for a single lamp for 1 mo. Discount from these rates: 2 lamps, 5 per cent.; 3 lamps, 10 per cent.; 4 lamps, 15 per cent.; 5 lamps, 20 per cent.; 10 per cent. discount from net rates if bills are paid before the fifteenth day of the month. Incandescent lights, series, 65 c. p., 6 or 7 nights per week, \$5.50 per mo.; 4 or 5 nights, \$5.00; 2 or 3 nights, \$4.50; 20 c. p. lamps, 6 or 7 nights, \$1.50; 4 or 5 nights, \$1.25. Prices given are for 1 lamp for 1 mo. Same discounts for 2 or more lights, and prompt payment, as for arc lights. Interior wiring charged to customer; renewals free.
Ware,	Arc lights, for 3 evenings a week, \$50.00 per lamp per year. Incandescent lights, \$10.00 per lamp per year in stores closing 3 nights per week at 6 P.M.; \$12.00 per lamp per year in stores open every evening.
Webster,	Arc lights, \$80.00 per lamp per year. Incandescent lights, \$10.00 per lamp per year burning until 10 P.M.; until 12 P.M., \$12.00; by the hour, 1½ cents per lamp per hour. Interior wiring, stores free; dwellings at cost. Lamp renewals free.
Westfield,	Arc lights, \$10.00 per lamp per mo.; discounts according as the light is used. Incandescent lights, \$2.50 per mo. until 11 P.M. for 50 or 75 c. p. lamps; until 1 A.M., \$3.50 per mo. Interior wiring and renewals free.
Woburn,	Incandescent lights, 16 c. p. lamps, 1½ cents per lamp per hour; 50 c. p. lamps, 3½ cents per lamp per hour.
Worcester,	Arc lights, 1 light for 4 mos. daily, 70 cents; for 8 mos. daily, and Saturdays for 12 mos., 60 cents per night; 2 lights for 4 mos. daily, 65 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 55 cents each per night; 3 lights for 4 mos. daily, 60 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 50 cents each per night. One or more lights every night in the year, 50 cents each. Incandescent lights, \$1.50 each per mo.

AUTHORIZATION OF GAS COMPANIES TO FURNISH ELECTRIC LIGHT.

Prior to Jan. 1, 1888, the gas companies in the following cities and towns had been authorized to furnish electric light: in the first seven by special acts, by the terms of their charter, or with the unanimous consent of the stockholders; the last four by order of the Board.

Dedham and Hyde Park.
Woburn.
Marblehead.
Charlestown.
Cottage City.
Spencer.

Waltham.
Clinton.
Westfield.
Brookline.
Lawrence.

In Dedham and Hyde Park, Woburn and Marblehead, the gas companies have not availed themselves of the privilege.

During the year the Board has granted permission to do electric lighting in Chelsea, New Bedford, Holyoke, Beverly and Newton.

The table shows the date of the order giving authority, the time allowed for procuring a plant, and the minimum capacity of the same:—

NAME OF COMPANY.	Date of Order.	Time Allowed.	Minimum Capacity.
Chelsea, .	Jan. 9,	6 mos.,	Not less than 50 horse-power and dynamo capacity to convert the same into light and to operate motors.
New Bedford,	Feb. 15,	6 mos.,	160 arc lights of nominally 2,000 candle-power each.
Holyoke, .	Mar. 30,	3 mos.,	300 arc lights of nominally 2,000 candle-power each.
Beverly, .	June 15,	3 mos.,	30 arc lights of nominally 2,000 candle-power each.
Newton, .	Nov. 23,	3 mos.,	90 arc lights of nominally 1,200 candle-power each, and 1,500 incandescent lights of nominally 16 candle-power each.

CHELSEA.

At the hearing on the petition of the Chelsea Gas Light Company, the Boston Electric Light Company was represented by its treasurer, who was present, as he said, not in opposition, but for the purpose of stating what his company had done and were prepared to do in supplying electric light in Chelsea.

It was shown that the Citizens' Electric Light Company of East Boston, whose stock and property were then owned by the Boston Electric Light Company, had been granted a location for poles in Chelsea, run several miles of wire, and erected ten or more electric lamps, which were then operated through a cable wire, laid from East Boston under the channel, and of sufficient size to carry a current for two hundred arc lights.

It was admitted that all electric lights which had been asked for by the people of Chelsea had been furnished, and no complaint was made in regard to the price of the lights. A willingness and the ability to meet all demands for electric lights in Chelsea were ex-

pressed by the Boston Electric Light Company. In answer to the inquiry by the Board whether there was business for more than one electric-light plant in Chelsea, all the parties present, including the petitioners, replied that there was not.

But the petitioning company was desirous of engaging in the business. It already had upon its gas plant a brick building well suited for electric apparatus, and the Boston Electric Light Company declared its readiness to transfer to the petitioner that portion of its franchise located in Chelsea, at a fair valuation. The gas company had a surplus in its treasury, and was able to add an electric plant without increase of its capital stock. After an agreement had been made for the purchase of the lines then in operation, should authority be obtained, the petition was granted.

NEW BEDFORD.

This petition was filed on Aug. 1, 1887, and was one of the earliest considered by the Board. The hearing was assigned for August 18. In accordance with the custom of the Board, notice of the hearing was served upon the Edison Electric Illuminating Company of New Bedford, the New Bedford Electric Light Company, and the city, and published in the local papers. At the hearing there was no appearance for the city, nor any number of citizens; but the corporations named were represented by counsel,—the New Bedford Electric Light Company in favor of the petition, and the Edison Company in opposition.

Representatives of these interests were heard, and the case was closed. It appeared that an agreement, conditional upon the petition being granted, had been executed by the directors of the Gas Company and New Bedford Electric Light Company, for the sale of the plant and franchises of the latter to the former, and that the stockholders of both had taken such action as the statute requires in such cases.

It seemed to be the view of the petitioners that the consideration of their request was mostly a formal matter, and that upon the performance of the conditions imposed by law their request would be granted as of course. Upon a careful review of this position, the Board was unable to agree with this view of the statute; and as no

effort had been made to show any public benefit likely to accrue from the consolidation proposed, there seemed no sufficient reason for granting the prayer of the petitioners. Before these views had been published, the petitioners asked to have the case re-opened, which request was granted. Pursuant to previous notice on September 17, the Board visited New Bedford, to examine the gas and electric-light plants, and study more fully the local conditions.

In the presence of the same parties as before, the case was then re-opened, and the renewed hearing was continued by subsequent adjournments at the office of the Board until Oct. 1, 1887, when it was finally closed. Ample opportunity was afforded all parties to offer evidence and arguments, and numerous witnesses were examined.

From the evidence presented, it appeared that the incandescent electric lighting in New Bedford was confined to a section of the city; that no effort to increase this area had been made or proposed; and that no considerable extension could be made by the Edison Company doing this business, except at an expense so great as to be practically prohibitive.

From a study of the operations and relations of the companies, it appeared that under the peculiar local conditions a considerable economy might result from the operation of the business by the gas company, — a reduction in cost by the use of a fuel of little or no market value, in the place of coal; a reduction in the cost of labor; and, by the proposed removal of the electric-light business to land already owned by the company, and unoccupied, the avoidance of rent and numerous other less important items of expense. The Gas Company avowed its intention to erect and equip a plant with sufficient facilities for supplying lights in every portion of the city where the same might be desired.

Furthermore, as the capital represented by the plant of the Electric Light Company was to be largely reduced in the combination of the two interests, it was clear that the Gas Company could afford to conduct the business with a less charge per lamp for the same dividends.

The Board, after careful review of the evidence submitted, and a thorough study of the whole situation, believing that sooner or later a share in the benefits thus to be derived would be realized by the

public, in price or quality of service, were of the opinion that the public interest would be well served by granting the prayer of the petitioner; and, on the fifteenth day of February, 1888, issued the authority as contemplated by the statute.

The only opposition to the petition was from the Edison Electric Illuminating Company, which had already in successful operation a plant of considerable size. It was ably and persistently urged, that to grant the petition would subject this company to an unequal and ruinous competition; that the surplus and assured profits of the Gas Company would be used to supply electric light at a loss; that the original establishment of the plant was a public benefit; that the shareholders were entitled to great consideration for having first invested their money in this direction, and that it was neither fair nor just that these investments should be thus seriously imperilled.

As soon as the hearings were begun, negotiations were entered into by the petitioners and respondents, looking to a purchase by the Gas Company of the entire property of the Edison Company, and resulting in a binding offer by the former of a sum which, in the judgment of the Board, insured substantial reimbursement to the shareholders of the latter; and such an offer was pending at the time of granting the petition. The force of the objection seemed by this to be very much lessened.

The Board, believing that a consolidation as proposed, if it could be effected at that time, would be of mutual advantage to the public as well as the companies interested, encouraged their negotiations, and, to enable them to be carried on without embarrassment, delayed their decision until terms were proposed which seemed to need only minor changes to become mutually satisfactory.

Some attempt was made at the hearing to show great superiority in each system used or proposed; but the Board did not assume to decide the questions thus raised.

The course of the Gas Company since receiving the authority strongly confirms the wisdom of the decision. No arrangement for sale, union or consolidation of the Gas Company and Edison Company has been consummated; but the purchase of the plant and franchise of the New Bedford Electric Light Company by the Gas Company was completed, and a liberal share of the energy and ability

of the latter company has been devoted to the development of that department of its business.

The output of gas during the calendar year just closed has been nearly ten per cent. more than for the preceding year; while the electric business has increased since March 1, 1888, from 154 full arcs to 195 full arcs, 18 half-arcs, 43 horse-power of motors, and nearly 2,500 16-candle-power incandescent lamps at what is believed to be fairly remunerative rates. The business of the Edison Company has during the same time increased from 3,800 to 5,700 lamps, or about fifty per cent.

HOLYOKE.

In Holyoke the stock of the Holyoke Electric Light and Power Company, with the exception of a few shares, was held in trust and practically owned by the Holyoke Water Power Company, the petitioner, on whose premises centrally located, and by whose water-power, the electric plant was situated and operated. For convenience in keeping the electric-lighting accounts and economy in management, both companies desired that the property and franchises might be transferred, and the business done in the name of the Holyoke Water Power Company.

At the hearing in Holyoke, the city was represented by its mayor, who stated that there was no objection on the part of the city to such transfer. No one appeared in opposition.

The Holyoke Water Power Company had been given the right, by a special Act of the Legislature, to supply the city of Holyoke with gas, and for many years had exercised that right. Such being the situation, the Board was of the opinion that the prayer of the petitioner ought to be granted.

BEVERLY.

Before the petition of the Beverly Gas Light Company was presented, it had substantially agreed to purchase the plant of the Beverly Electric Light Company. Both companies therefore joined in the request that the Gas Company might be allowed to do electric lighting. There were no remonstrants. After the agreement of sale had been completed and made binding upon the stockholders of each company, the petition was granted.

NEWTON.

The petition of the Newton and Watertown Gas Light Company was opposed by eminent counsel in behalf of the Newton Electric Light and Power Company, which appeared as remonstrant. A request, signed by some five hundred citizens of Newton, represented by counsel, was presented in aid of the petition; and a remonstrance, signed by about the same number of citizens, was offered by counsel for the Electric Light Company, against granting the petition. The solicitor of Newton was present at the hearings, as he stated, for the purpose of protecting the interests of the city, but not with the intention of opposing or aiding either side.

It was manifest that much interest was felt by the citizens and by different members of the city government, and that the people at the outset were divided in their opinions upon the subject. The interest had been heightened by negotiations between the city and the respective companies for the street lighting, the prevailing sentiment being in favor of electric lights throughout the streets instead of gas, which had been largely used. The Electric Light Company had named a price for which it would do the work, and the Gas Company had proposed to do it for a somewhat less price, if it could have the authority to engage in the electric lighting business.

The Electric Light Company, since its organization in 1886, had with commendable enterprise established and extended its business in Newton and Watertown, and shown a disposition to supply lights in both of these places wherever there was a demand or use for them. The character and ability of the men connected with the company were a guaranty that the business would thrive.

The Gas Company claimed that it had an equitable title to the business, by reason of its early and repeated efforts before the Legislature to get a special charter, which had been thwarted, not by any alleged want of merit in its claim, but rather by accident, and especially by the interposition of the statute referring the matter to this Board; and that meanwhile the Electric Light Company had taken advantage of the untoward circumstances, which existed by no fault of the Gas Company. It further pressed the fact of its financial strength, its economical and successful management of the gas busi-

ness, and its ability to manufacture and sell electric light at the lowest rates.

The Board was compelled to consider the situation as it existed at the time of filing the petition. The Electric Light Company had been lawfully chartered and organized under the general laws, and had rightfully acquired its franchises and its business. In those respects it stood on the same footing with the Gas Company; and both were entitled to equal consideration, and, so far as it was proper to give it, equal protection. It was the case of one gas company and one electric-light company covering the same territory, each successful, doing its work equally well so far as appeared, and each anxious to do as much lighting as possible. The eloquent arguments of counsel could not modify this state of things; and at the close of the hearing there could be no well-founded expectation that a decision would be given favorable to the petitioner.

The Board had fixed upon a time, immediately following this hearing, for a visit to several Western cities, for the purpose of gathering information in regard to subjects before it; and the Newton case was left for adjudication until a later day.

As soon as the Board returned, an application was made for a further hearing, which was granted. It then appeared that the Gas Company had conditionally bought the electric-light plant, on terms mutually satisfactory to the companies, both of which now joined in asking that the petition be granted. The remonstrance of citizens was withdrawn, and the city solicitor stated that he had no objection to interpose on the part of the city. The Gas Company did not propose to increase its capital stock, but to pay for the electric-light property with its surplus, and by a loan at a low rate of interest. The Board had recognized the temporary advantages, at least, of a competition between the two companies and the two kinds of light, and would have watched the result of such competition with interest. But it was believed that the permanent interests of the people of Newton and Watertown, considering the size and distribution of the population, could be best secured by allowing the Gas Company to furnish both kinds of light. The price of the light should be gradually cheapened thereby.

The villages are so numerous, and the territory so unevenly popu-

lated, that one company can better lay out the work of distribution. Both gas-pipes and electric wires need not be carried over the same ground, when either would be sufficient. Something ought to be saved in the superintendence and general management, if there is but one company.

A company which practically asks the privilege of doing all the lighting for two places like these, must likewise be mindful of its duties, and be ready with the best appliances and the most economical methods to meet every reasonable demand. The community has come to regard the certainty and regularity of dividends as the best test of the value of securities, and the enjoyment of something like a monopoly must be accompanied with a willingness to accept of only fair and moderate dividends. A monopoly of this kind, supplying what has come to be regarded, not a convenience merely, but a necessity, will be tolerated only so long as it deals fairly and honestly with the community. Its only right to exist rests on the benefit it brings.

There are now pending petitions from the gas companies at Amherst and Athol for authority to furnish electric light.

BOSTON ELECTRIC LIGHT COMPANY, APPELLANT, *vs.* A. W. PERRY.

This was an appeal by the Boston Electric Light Company, under chapter 382 of the Acts of 1887, from an order passed by the Board of Aldermen of the city of Boston, July 16, 1888, granting A. W. Perry permission to run ten wires across Summer Street, for the purpose of operating electric lights, as follows:—

Ordered, That permission be hereby granted to A. W. Perry to run ten wires from Church Green block across Summer Street, to the store occupied by E. & A. H. Batcheller and Joseph Harris & Sons, as shown on a plan made by A. W. Perry, dated May 21, 1888, and deposited in the office of the superintendent of streets, upon condition that said Perry agrees to remove said wires at any time when so directed by the Board of Aldermen.

Fourteen days' notice of the time of hearing on the appeal was served on the above-named parties, also on the city and the Edison Electric Illuminating Company of Boston. Notice was also published in one or more newspapers.

The appellant and said Perry, the only parties appearing in the

case, were represented by counsel. It was shown that in July, 1887, an electric-light plant was started by private parties in a building on Federal Court, from which some fifteen customers were supplied with about 185 lights, within the territory bounded by Summer, Devonshire, Federal and High streets, and without running wires across any public way. This plant was purchased by said Perry in March, 1888, and for a time operated by him where it stood. He soon moved it to the Church Green property, mentioned in said order, of which he had a lease, and which was situated on the other or southerly side of Summer Street, as the steam-power already there for running the elevator and some printing presses could also be used for operating a dynamo.

Mr. Perry is also lessee of some half-dozen other buildings in the vicinity, and to light these he had run wires across Summer Street from his Church Green premises, none of which buildings before had electric lights. He had done this without the consent of the mayor and aldermen, and before he was aware that such consent was necessary. When he was informed of it, he petitioned for the needed permission. At the hearing before the aldermen, notice of which had been given by newspaper publication, there were no remonstrants; the appellant company not appearing, for the reason, as was stated, that none of its officers had seen the notice or knew of the hearing, otherwise they would have attended and opposed the grant.

At the time of the appeal, said Perry was supplying about 700 lights, 200 of which were in the various premises leased by him, and the rest in other buildings. He is not able to do more with his present plant, or to enlarge it in the rooms where it now is. The plant, as it now exists, cost Perry from \$10,000 to \$11,000. When he first bought it, the wires did not run to any of his stores. In addition to wires across Summer Street, he has, without the required consent, so far as appears, extended two wires over High Street, by which a building is lighted on the easterly side of that street. The wires to the store of Harris & Sons, mentioned in the order, reach the district bounded by Summer, South, Essex and Lincoln streets.

It was further shown that the Boston Electric Light Company has a plant, for arc and incandescent lighting, located on Congress Street, about two hundred feet from High Street, from which it lights build-

ings on Summer Street at the corner of Arch Street, and has wires over the Church Green estate, which were run in August, 1887, and supplies are lights to some stores which also have Mr. Perry's incandescent lights.

The appellant offered to show, and it was admitted that its officers would testify, that it is now for the first time making a profit in its business; that the constituent companies, before their consolidation with the Boston Electric Light Company, were run at a loss; that there was a constant demand on the company for light at lower prices, which could not be met if the company is to be deprived of any substantial part of its territory.

Under the above grant of the Board of Aldermen, electric lights, both arc and incandescent, can lawfully be furnished to all buildings within the following lines: beginning at Summer Street, running through Devonshire, Franklin, Federal, High, South, Essex, Lincoln, Bedford and Kingston streets, around to Summer Street at the starting point. This is a substantial and valuable portion of the city for the lighting business. While the rooms now used by Mr. Perry are fully occupied, there is nothing in the order, or in the Statutes if the order stands, to prevent the enlargement of the rooms or the removal of the plant to other and larger quarters.

It must be borne in mind that the companies now enjoying the franchise in the territory, namely, the Boston Electric Light Company and the Edison Electric Illuminating Company of Boston, are also subject to the burdens and restrictions placed on them by the Statutes. If a tenant asks either company for the light, it must be carried to him if it can reasonably be done, and be sold at a fair price. If consumers believe the prices charged are too high, they can petition for a reduction, and the order of this Board as to the price is binding upon the companies. These companies claim a general franchise throughout the city; and, on the other hand, they can be compelled to meet all reasonable demands. It is otherwise with Mr. Perry. He wishes simply to light his leased stores, and to sell only such additional lights as he can produce with his surplus power. To this extent it is not unlikely that he can supply light at a lower price or at greater profit than either of the companies.

But light is one of the necessities of modern life and business,

and, like water, should be had at as nearly uniform rates as possible. Mr. Perry, as he is situated, can supply a portion more cheaply than the whole of the territory, while the company could light the whole at a less rate than a part.

Isolated electric-light plants, as they are termed, are not uncommon. One can be placed in any building without the license of the Board of Aldermen, and the light from it can be sold to the surrounding buildings without hindrance, so far as it is possible to do so without crossing a public street.

In the present stage of the development of electric lighting, it is not clear how far this privilege should be extended.

It may be said that one such license is not of great importance, which is true; but applicants, under like circumstances, are entitled to equal favor. This grant to Mr. Perry would doubtless be held as a personal license, incapable of being sold or transferred by him; and, if so, it would not pass to his executors or administrators. If it is otherwise, after his decease it might fall into irresponsible hands.

As a rule, such franchises should be held only by perpetual bodies, like corporations, so that there may always be a continuous responsible ownership. This is indispensable to the future adjustment and proper regulation of wires, which cannot be much longer deferred, whether overhead or underground.

A grant in a case like this, if given at all, should be only for a short and stated term. The longest lease which Mr. Perry holds terminates in less than five years. Is there any reason why his license ought not by express limitation to cease within that time? And it should be subject to revocation at any time. It is not forgotten that the order in question contains a condition that the wires are to be removed on request. But no clear legal authority is found for inserting the condition. Section 45 of chapter 27 of the Public Statutes provides that terms and conditions may be imposed when the grant is for *private use*. But here the use is not private: most of the light is sold. The order, then, must rest on section 49 of the same chapter, as one of the laws, if applicable, referred to in chapter 221 of the Statutes of 1883; and that section does not provide for prescribing terms or conditions.

For the reasons above stated, the appeal was sustained, and the order annulled.

Cases may arise where the refusal of a temporary right to cross a public street might be a hardship, and there may be no sufficient objection to granting such licenses in meritorious cases, upon proper terms and conditions. If such shall be the judgment of the Legislature, adequate authority can readily be given.

The Board also respectfully recommends, that, on an appeal from the mayor and aldermen or selectmen, power be given the Board to annul the whole or part of a grant, and to modify its terms and conditions, or prescribe others.

If any change of the law in this respect, or in regard to other matters contained in this report, shall be deemed advisable, the Board will cheerfully render any assistance in its power to secure the result desired by the Legislature.

ABRAHAM B. COFFIN,
EDWARD T. ROWELL,
FORREST E. BARKER,

Board of Gas Commissioners.

Boston, Jan. 2, 1889.

APPENDICES.

APPENDIX A.

GAS COMPANIES' BALANCE SHEETS AND PROFIT AND LOSS ACCOUNTS, JUNE 30, 1888.

[From the returns made as corrected by the Board.]

ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$21,214 97
Machinery and manufacturing appliances, }	
Street mains, }	6,002 05
Meters, }	
Cash on hand,	70 36
Due for gas,	489 10
Other accounts due the Company,	9,312 62
Tar on hand,	125 00
Office furniture,	200 00
Total assets, as per books of the Company,	\$37,414 10

LIABILITIES.

Capital stock,	\$17,300 00
Unpaid bills,	184 79
Total liabilities, as per books of the Company,	\$17,484 79
Profit and loss balance,	19,929 31
	\$37,414 10

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$19,569 48
Balance of manufacturing account,		5,499 37
Interest received,		153 39
Rents,		77 87
Dividends declared,	\$3,460 00	
Other items,	1,910 80	
Balance June 30, 1888	19,929 31	
	\$25,300 11	\$25,300 11

AMHERST GAS COMPANY.

ASSETS.

Real estate,	\$635 85
Machinery and manufacturing appliances,	7,972 79
Street mains,	6,449 12
Meters,	1,004 44
Cash on hand,	617 83
Due for gas,	747 20
Coke on hand,	22 80
Enrichers on hand,	95 97
Other materials on hand,	47 00
<hr/>	
Total assets, as per books of the Company,	\$17,593 00

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	1,500 00
Unpaid bills,	233 69
Unpaid dividends,	24 00
Interest due but not paid,	38 61
<hr/>	
Total liabilities, as per books of the Company,	\$11,796 30
Profit and loss balance,	5,796 70
<hr/>	
	\$17,593 00

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$4,795 28
Balance of manufacturing account,		1,839 29
Dividends declared,	\$800 00	
Interest paid,	37 87	
Balance June 30, 1888,	5,796 70	
<hr/>		<hr/>
	\$6,634 57	\$6,634 57

ARLINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,000 00
Machinery and manufacturing appliances,	35,000 00
Street mains,	34,000 00
Cash on hand,	1,750 91
Due for gas,	2,869 18
Coal on hand,	3,046 96
Other materials on hand,	1,906 15

Total assets, as per books of the Company, \$79,573 20

LIABILITIES.

Capital stock,	\$70,000 00
Unpaid bills,	78 10
Scrip,	162 00
Unpaid dividends,	798 00

Total liabilities, as per books of the Company, . . . \$71,038 10

Profit and loss balance, 8,535 10

\$79,573 20

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$8,025 89
Balance of manufacturing account,		4,962 23
Dividends declared,	\$4,200 00	
Construction charged off,	253 02	
Balance June 30, 1888,	8,535 10	
	<hr/>	<hr/>
	\$12,988 12	\$12,988 12

ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$12,109 13
Machinery and manufacturing appliances,	24,221 83
Street mains,	9,189 47
Meters,	1,732 08
Cash on hand,	97 16
Due for gas,	1,673 07
Other accounts due the Company,	87 11
Coal on hand,	605 00
Coke on hand,	1 60
Tar on hand,	30 00
Other materials on hand,	245 17
Stoves on hand,	220 13
Office furniture,	129 40

Total assets, as per books of the Company, . . . \$50,341 15

LIABILITIES.

Capital stock,	\$23,200 00
Notes payable,	14,000 00
Unpaid bills,	2 25

Total liabilities, as per books of the Company, . . . \$37,202 25

Profit and loss balance, 13,138 90

\$50,341 15

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$13,763 85
Balance of manufacturing account,		6,598 48
Dividends declared,	\$4,176 00	
Interest paid,	595 25	
Construction charged off,	2,452 18	
Balance June 30, 1888,	13,138 90	
	<u>\$20,362 33</u>	<u>\$20,362 33</u>

BAY STATE GAS COMPANY.

ASSETS.

Real estate,	\$76,000 00
Machinery and manufacturing appliances, }	
Street mains and buildings, }	750,000 00
Coal on hand,	3,866 88
Enrichers on hand,	2,137 53
Horses, wagons, etc.,	790 50
Gas on hand,	1,118 00

Total assets, as per books of the Company, . . . \$833,912 91

LIABILITIES.

Capital stock,	\$500,000 00
Bonds issued. [See note.]	

Total liabilities, as per books of the Company, . . . \$500,000 00

Profit and loss balance, 333,912 91

\$833,912 91

NOTE. — The company is indebted, under the terms of a contract entered into and executed by it on the eleventh day of March, A.D. 1885, by which contract it agreed to pay \$4,500,000 in ninety-nine years from said date, in consideration of a contract made with it of even date for the erection and completion of its plant and works. The exact amount of its indebtedness cannot therefore be accurately stated until said contract is completed.

BEVERLY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$23,000 00
Machinery and manufacturing appliances,	8,000 00
Street mains,	15,000 00
Meters,	3,000 00
Cash on hand,	2,689 26
Due for gas,	3,280 10
Other accounts due the Company,	229 65
Coal on hand,	750 00
Tar on hand,	3 00
Purifying materials on hand,	5 00
Other materials on hand,	50 00
Stoves on hand,	12 88
Lungren lamps,	387 12
Office furniture,	239 00

Total assets, as per books of the Company, \$56,646 01

LIABILITIES.

Capital stock,	\$40,000 00
Special stock,	11,800 00
Unpaid bills,	1,260 81

Total liabilities, as per books of the Company, . . . \$53,060 81

Profit and loss balance, 3,585 20

\$56,646 01

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$1,325 74
Balance of manufacturing account,		3,964 93
Rents,		84 00
Other items of income,		110 40
Interest paid,	\$731 40	
Construction charged off,	1,168 47	
Balance June 30, 1888,	3,585 20	
	<u>\$5,485 07</u>	<u>\$5,485 07</u>

BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,354,914 86
Machinery and manufacturing appliances,	900,000 00
Street mains,	215,000 00
Meters,	5,000 00
Cash on hand,	172,059 85
Due for gas,	172,650 10
Coal on hand,	206,238 76
Coke on hand,	3,727 50
Tar on hand,	3,031 25
Enrichers on hand,	19,958 46
Purifying materials on hand,	1,450 00
Other materials on hand,	26,584 76
<hr/>	
Total assets, as per books of the Company,	\$3,080,615 54

LIABILITIES.

Capital stock,	\$2,500,000 00
Unpaid bills,	61,757 04
Deposits,	14,155 54
Unpaid dividends,	4,475 00
Depreciation fund,	330,944 94
<hr/>	
Total liabilities, as per books of the Company,	\$2,911,332 52
Profit and loss balance,	169,283 02
<hr/>	
	\$3,080,615 54

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$156,091 75
Balance of manufacturing account,		419,569 10
Other items of income,		1,878 46
Dividends declared,	\$250,000 00	
Construction charged off,	158,055 26	
Other items,	201 03	
Balance June 30, 1888,	169,283 02	
<hr/>		<hr/>
	\$577,539 31	\$577,539 31

BROCKTON GAS LIGHT COMPANY.¹

ASSETS.

Real estate,	\$49,000 00
Machinery and manufacturing appliances, }	59,171 74
Street mains, }	
Meters, }	
Cash on hand,	2,669 38
Coal on hand,	365 36
Other materials on hand,	94 13
Stoves on hand,	401 91
<hr/>	
Total assets, as per books of the Company,	\$111,702 52

LIABILITIES.

Capital stock,	\$64,000 00
Bonds issued,	35,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$99,000 00
Profit and loss balance,	12,702 52
<hr/>	
	\$111,702 52

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$12,633 72
Interest received,		125 00
Rents,		6,580 00
Dividends declared,	\$4,480 00	
Interest paid,	2,076 00	
Other items,	80 20	
Balance June 30, 1888,	12,702 52	
<hr/>		<hr/>
	\$19,338 72	\$19,338 72

¹ Company leased.

BROOKLINE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$213,720 38
Machinery and manufacturing appliances, }	
Street mains, }	190,491 63
Meters,	10,280 11
Cash on hand,	3,969 66
Due for gas,	16,913 91
Other accounts due the Company,	2,814 91
Coal on hand,	7,529 63
Coke on hand,	75 00
Tar on hand,	192 00
Enrichers on hand,	1,740 00
Purifying materials on hand,	548 00
Other materials on hand,	10,047 78
Horses, wagons, etc.,	2,243 00
Office furniture,	500 00
Electric plant,	84,955 79
Total assets, as per books of the Company,	\$546,021 80

LIABILITIES.

Capital stock,	\$450,000 00
Notes payable,	70,000 00
Unpaid bills,	1,464 58
Deposits,	210 00
Total liabilities, as per books of the Company,	\$521,674 58
Profit and loss balance,	24,347 22
	\$546,021 80

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$23,655 27
Balance of manufacturing account,		36,945 31
Interest received,		100 50
Rents,		84 68
Balance of electric lighting account,		5,075 22
Other items of income,		262 22
Dividends declared,	\$24,000 00	
Interest paid,	4,620 71	
Depreciation,	13,155 27	
Balance June 30, 1888,	24,347 22	
	\$66,123 20	\$66,123 20

CAMBRIDGE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$64,767 66
Machinery and manufacturing appliances, }	
Street mains, }	710,898 33
Cash on hand,	11,643 75
Due for gas,	35,102 32
Other accounts due the Company,	2,259 54
Coal on hand,	12,142 92
Coke on hand,	1,495 00
Tar on hand,	137 50
Purifying materials on hand,	360 00
Other materials on hand,	5,600 00
Lungren lamps,	4,281 50
Notes receivable,	237 00
Investments,	39,103 59

Total assets, as per books of the Company, . . . \$888,029 11

LIABILITIES.

Capital stock,	\$700,000 00
Deposits,	960 00
Other amounts due from the Company,	3,328 02

Total liabilities, as per books of the Company, . . . \$704,288 02

Profit and loss balance, 183,741 09

\$888,029 11

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$185,136 79
Balance of manufacturing account,		74,790 09
Interest received,		2,745 38
Rents,		1,023 38
Other items of income,		45 45
Dividends declared,	\$70,000 00	
Depreciation,	10,000 00	
Balance June 30, 1888,	183,741 09	
	<u>\$263,741 09</u>	<u>\$263,741 09</u>

CHARLESTOWN GAS COMPANY.

ASSETS.

Real estate,	}					\$523,809	37
Machinery and manufacturing appliances,	}	.	.	.	.
Street mains,		.	.	.	.	1,680	98
Meters,		.	.	.	.	1,016	97
Cash on hand,		.	.	.	.	1,299	18
Due for gas,		.	.	.	.	17,955	96
Other accounts due the Company,		.	.	.	.	3,031	90
Coal on hand,		.	.	.	.	2,246	13
Tar on hand,		.	.	.	.	531	95
Enrichers on hand,		.	.	.	.	248	05
Notes receivable,		.	.	.	.	2,000	00
Investments,		.	.	.	.	32,350	00
Total assets, as per books of the Company,		.	.	.	.	\$586,170	49

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	\$500,000	00
Notes payable,	.	.	.	.	.	.	.	.	.	7,000	00
Unpaid bills,	.	.	.	.	.	.	.	.	.	1,831	35
Deposits,	.	.	.	.	.	.	.	.	.	466	50
Unpaid dividends,	.	.	.	.	.	.	.	.	.	825	00
Reserved fund,	.	.	.	.	.	.	.	.	.	36,273	60
Suspense account,	.	.	.	.	.	.	.	.	.	392	94
											<hr/>	
Total liabilities, as per books of the Company,	.	.	.	.	.	.	.	.	.	\$546,789	39
Profit and loss balance,	.	.	.	.	.	.	.	.	.	39,381	10
											<hr/>	
											\$586,170 49	

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$33,218 07
Balance of manufacturing account,		51,391 18
Electric light manufacturing account,		5,748 58
Rents,		282 00
Other items of income,		611 82
Dividends declared,	\$50,000 00	
Interest paid,	1,270 53	
Other items,	600 02	
Balance June 30, 1888,	39,381 10	
	<u>\$91,251 65</u>	<u>\$91,251 65</u>

CHELSEA GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$161,822 79
Machinery and manufacturing appliances, }	150,000 00
Street mains, }	
Meters, }	
Cash on hand,	623 92
Due for gas,	9,646 16
Other accounts due the Company,	480 38
Stoves and Lungren lamps on hand,	454 80
Electric-light account,	16,466 91

Total assets, as per books of the Company, . . . \$339,494 91

LIABILITIES.

Capital stock,	\$300,000 00
Deposits,	852 00

Total liabilities, as per books of the Company, . . . \$300,852 00

Profit and loss balance, 38,642 91

\$339,494 91

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$30,404 01
Balance of manufacturing account,		25,391 14
Rents,		184 00
Other items of income,		956 76
Dividends declared,	\$18,000 00	
Interest paid,	25 58	
Other items,	267 42	
Balance June 30, 1888,	38,642 91	
	\$56,935 91	\$56,935 91

CITIZENS' GAS LIGHT COMPANY OF QUINCY.

ASSETS.

Real estate,	}	. . . .	\$44,967 86
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			215 12
Due for gas,			902 36
Coal on hand,			575 00
Tar on hand,			50 00
Enrichers on hand,			6 00
Purifying materials on hand,			50 00
Other materials on hand,			25 00
Stoves on hand,			100 00
Fixtures on hand,			500 00
Horses, wagons, etc.,			100 00
Office furniture,			100 00

Total assets, as per books of the Company, . . . \$47,591 34

LIABILITIES.

[illegible]

Total liabilities, as per books of the Company, . . . \$46,752 00

Profit and loss balance,	839 34
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\$47,591 34

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$676 09
Balance of manufacturing account,		1,694 58
Rents,		84 00
Other items of income,		330 17
Dividends declared,	\$1,320 00	
Interest paid,	625 50	
Balance June 30, 1888,	839 34	
	<hr/>	<hr/>
	\$2,784 84	\$2,784 84

CITIZENS' GAS LIGHT COMPANY OF SOUTH READING.

ASSETS.

Real estate,	}	. . . . .	\$95,300 00
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			5,039 17
Due for gas,			3,107 58
Coal on hand,			395 76
Tar on hand,			227 50
Purifying materials on hand,			17 04
Total assets, as per books of the Company,			\$104,087 05

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	\$95,300 00
Unpaid dividends,	.	.	.	.	.	.	.	.	1,008 00
									<hr/>
Total liabilities, as per books of the Company,	.	.	.	.	.	.	.	.	\$96,308 00
Profit and loss balance,	.	.	.	.	.	.	.	.	7,779 05
									<hr/>
									\$104,087 05

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$7,179 60
Balance of manufacturing account,		3,458 45
Dividends declared,	\$2,859 00	
Balance June 30, 1888,	7,779 05	
	\$10,638 05	\$10,638 05

COTTAGE CITY GAS COMPANY.

ASSETS.

Real estate,	\$500 00
Machinery and manufacturing appliances, }	
Street mains, }	61,019 22
Meters, }	
Cash on hand,	3 07
Other accounts due the Company,	24 70
Electric-light plant,	20,000 00
<hr/>	
Total assets, as per books of the Company,	\$81,546 99

LIABILITIES.

Capital stock,	\$60,000 00
Notes payable,	21,240 00
<hr/>	
Total liabilities, as per books of the Company,	\$81,240 00
Profit and loss balance,	306 99
<hr/>	
	\$81,546 99

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of manufacturing account,	\$411 54	
Electric light manufacturing account,		\$1,273 76
Interest paid,	555 23	
Balance June 30, 1888,	306 99	
<hr/>		<hr/>
	\$1,273 76	\$1,273 76

DANVERS GAS LIGHT COMPANY.

ASSETS.

[illegible]

LIABILITIES.

Capital stock,	20,000	00
Notes payable,	2,500	00
Unpaid bills,	572	87
Total liabilities, as per books of the Company,	23,072	87

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,	\$924 29	
Balance of manufacturing account,	170 59	
Interest paid,	73 18	
Balance June 30, 1888,		\$1,168 06
	<hr/>	
	\$1,168 06	\$1,168 06

DEDHAM AND HYDE PARK GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$8,009 05
Machinery and manufacturing appliances,	13,097 64
Street mains,	19,671 23
Meters,	1,522 82
Cash on hand,	2,978 61
Due for gas,	907 27
Other accounts due the Company,	153 37
Coal on hand,	249 28
Coke on hand,	26 00
Tar on hand,	265 00
Purifying materials on hand,	68 46
Other materials on hand,	100 00
Horses, wagons, etc.,	340 00
Office furniture,	141 00
<hr/>	
Total assets, as per books of the Company,	\$47,529 73
Profit and loss balance,	61,757 77
<hr/>	
	\$109,287 50

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	9,000 00
Unpaid bills,	287 50
<hr/>	
Total liabilities, as per books of the Company,	\$109,287 50

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,	\$62,949 64	
Balance of manufacturing account,		\$5,455 37
Rents,		70 00
Other items of income,		29 97
Dividends declared,	3,000 00	
Interest paid,	670 36	
Construction charged off,	693 11	
Balance June 30, 1888,		61,757 77
<hr/>		<hr/>
	\$67,313 11	\$67,313 11

DORCHESTER GAS LIGHT COMPANY.

ASSETS.

[illegible]

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	\$400,000	00
Unpaid bills,	.	.	.	.	.	.	.	.	.	9,804	13
Deposits,	.	.	.	.	.	.	.	.	.	50	00
											<hr/>	
Total liabilities, as per books of the Company,	.	.	.	.	.	.	.	.	.	\$409,854	13
Profit and loss balance,	.	.	.	.	.	.	.	.	.	135,446	82
											<hr/>	
											\$545,300	95

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$111,053 17
Balance of manufacturing account,		46,054 64
Interest received,		980 00
Rents,		222 00
Other items of income,		1,321 66
Dividends declared,	\$24,000 00	
Other items,	184 65	
Balance June 30, 1888,	135,446 82	
	<hr/>	<hr/>
	\$159,631 47	\$159,631 47

EAST BOSTON GAS COMPANY.

ASSETS.

Real estate,	}	. . .	\$223,521 06
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			18,014 42
Due for gas,			5,159 64
Coal on hand,			3,285 69
Purifying materials on hand,			32 90
Other materials on hand,			3,144 05
Investments,			34,000 00
Total assets, as per books of the Company, . . .			\$287,157 76

LIABILITIES.

Capital stock,	\$220,000 00
Unpaid dividends,	8,800 00
Other amounts due from the Company,	6 49
<hr/>	
Total liabilities, as per books of the Company,	\$228,806 49
Profit and loss balance,	58,351 27
<hr/>	
	\$287,157 76

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$53,355 57
Balance of manufacturing account,		20,192 89
Interest received,		2,289 50
Other items of income,		113 31
Dividends declared,	\$17,600 00	
Balance June 30, 1888,	58,351 27	
		<hr/>
		\$75,951 27
		<hr/>
		\$75,951 27

EASTHAMPTON GAS COMPANY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	10,500 00
Street mains,	8,000 00
Meters,	500 00
Cash on hand,	666 99
Due for gas,	1,400 25
Coal on hand,	625 95
Coke on hand,	18 00
Tar on hand,	101 00
Enrichers on hand,	103 50
Purifying materials on hand,	111 00
Other materials on hand,	48 20
Notes receivable,	3,000 00
<hr/>	
Total assets, as per books of the Company,	\$34,574 89

LIABILITIES.

Capital stock,	\$30,000 00
Unpaid bills,	177 65
<hr/>	
Total liabilities, as per books of the Company,	\$30,177 65
Profit and loss balance,	4,397 24
<hr/>	
	\$34,574 89

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$4,758 66
Balance of manufacturing account,		2,453 58
Interest received,		135 00
Rents,		50 00
Dividends declared,	\$3,000 00	
Balance June 30, 1888,	4,397 24	
<hr/>		<hr/>
	\$7,397 24	\$7,397 24

FALL RIVER GAS WORKS COMPANY.

ASSETS.

Real estate,	\$150,000 00
Machinery and manufacturing appliances,	35,000 00
Street mains,	75,000 00
Meters,	1,512 03
Cash on hand,	11,156 53
Due for gas,	3,830 79
Other accounts due the Company,	936 22
Coal on hand,	2,442 30
Coke on hand,	20 65
Tar on hand,	302 13
Enrichers on hand,	277 81
Purifying materials on hand,	158 00
New services,	4,288 10
Stoves on hand,	1,301 81
Fixtures on hand,	1,289 54
Horses, wagons, etc.,	86 40
Office furniture,	403 96
Extension of works and mains, etc.,	37,392 54
Gas on hand,	103 02
Total assets, as per books of the Company,	<u>\$325,501.83</u>

LIABILITIES.

Capital stock,	\$288,000 00
Unpaid bills,	7,974 76
Deposits,	218 30
Total liabilities, as per books of the Company,	<u>\$296,193 06</u>
Profit and loss balance,	29,308 77
	<u>\$325,501 83</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$16,967 57
Balance of manufacturing account,		23,159 35
Interest received,		11 48
Rents,		869 71
Other items of income,		6 80
Dividends declared,	\$8,640 00	
Depreciation,	3,066 14	
Balance June 30, 1888,	29,308 77	
	<u>\$41,014 91</u>	<u>\$41,014 91</u>

FITCHBURG GAS COMPANY.

ASSETS.

Real estate,	\$8,500 00
Machinery and manufacturing appliances, }	43,274 85
Street mains, }	
Meters, }	
Cash on hand,	5,406 72
Due for gas,	1,406 70
Other accounts due the Company,	276 33
Coal on hand,	1,989 00
Notes receivable,	5,207 97

Total assets, as per books of the Company, \$66,061 57

LIABILITIES.

Capital stock, \$60,000 00

Total liabilities, as per books of the Company, . . \$60,000 00

Profit and loss balance, 6,061 57

\$66,061 57

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$5,749 33
Balance of manufacturing account,		8,048 73
Interest received,		301 10
Water rents,		962 25
Dividends declared,	\$9,000 00	
Balance June 30, 1888,	6,061 41	
	<u>\$15,061 41</u>	<u>\$15,061 41</u>

GARDNER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$12,500 00
Machinery and manufacturing appliances,	9,600 00
Street mains,	20,000 00
Meters,	400 00
Cash on hand,	12 54
Due for gas,	117 34
Other accounts due the Company,	22 76
Oil on hand,	75 00

Total assets, as per books of the Company,	\$42,727 64
Profit and loss balance,	842 26
	<hr/>
	\$43,569 90

LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	12,500 00
Notes payable,	855 00
Other amounts due from the Company,	214 90

Total liabilities, as per books of the Company,	\$43,569 90
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of manufacturing account,	\$842 26	
Balance June 30, 1888,		\$842 26
	<hr/>	<hr/>
	\$842 26	\$842 26

GLOUCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$27,000 00
Machinery and manufacturing appliances,	12,835 00
Street mains,	20,000 00
Meters,	2,465 00
Cash on hand,	5,136 48
Due for gas,	2,705 53
Other accounts due the Company,	2,455 61
Coal on hand,	1,143 00
Tar on hand,	275 00
Enrichers on hand,	98 50
Purifying materials on hand,	170 00
Other materials on hand,	505 91
Stoves on hand,	182 00
Fixtures on hand,	525 00
Office furniture,	150 00
Investments,	13,400 00

Total assets, as per books of the Company, \$89,047 03

LIABILITIES.

Capital stock,	\$62,300 00
Unpaid bills,	664 69

Total liabilities, as per books of the Company, . . . \$62,964 69

Profit and loss balance, 26,082 34

\$89,047 03

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$25,872 01
Balance of manufacturing account,		5,951 02
Interest received,		697 80
Rents,		2,330 40
Other items of income,		1,009 57
Dividends declared,	\$7,476 00	
Depreciation,	2,281 46	
Other items,	21 00	
Balance June 30, 1888,	26,082 34	
	<u>\$35,860 80</u>	<u>\$35,860 80</u>

	DR.	CR.
Balance June 30, 1887,		\$1,000 23
Balance of manufacturing account,		728 05
Dividends declared,	\$2,520 00	
Interest paid,	29 63	
Other items,	91 90	
Balance June 30, 1888,		913 25
	<hr/>	<hr/>
	\$2,641 53	\$2,641 53

HAVERHILL GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	.	.	.	.	\$75,000	00
Machinery and manufacturing appliances,							
Street mains,	.	.	.	.	.	.	8,108 33
Meters,	.	.	.	.	.	.	1,125 35
Cash on hand,	.	.	.	.	.	.	787 66
Due for gas,	.	.	.	.	.	.	4,383 06
Other accounts due the Company,	.	.	.	.	.	.	520 13
Coal on hand,	.	.	.	.	.	.	1,355 72
Coke on hand,	.	.	.	.	.	.	54 00
Tar on hand,	.	.	.	.	.	.	1,218 00
Enrichers on hand,	.	.	.	.	.	.	390 00
Purifying materials on hand,	.	.	.	.	.	.	450 00
Lungren lamps on hand,	.	.	.	.	.	.	929 81
New holder and retort house,	.	.	.	.	.	.	45,705 27
Investments,	.	.	.	.	.	.	10,900 00

Total assets, as per books of the Company, . . . \$150,927 33

LIABILITIES.

[illegible]

Total liabilities, as per books of the Company, . . \$115,288 90

Profit and loss balance,	35,638 43
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₹150,927 33

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$16,878 07
Balance of manufacturing account,		26,155 68
Interest received,		425 50
Other items of income,		360 00
Dividends declared,	\$7,500 00	
Interest paid,	680 82	
Balance June 30, 1888,	35,638 43	
	<hr/>	<hr/>
	\$43,819 25	\$43,819 25

IPSWICH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,400 00
Machinery and manufacturing appliances,	2,000 00
Street mains,	5,100 00
Meters,	1,300 00
Cash on hand,	111 66
Due for gas,	291 32
Coal on hand,	14 00

Total assets, as per books of the Company,	\$12,216 98
Profit and loss balance,	14,817 67

\$27,034 65

LIABILITIES.

Capital stock,	\$16,000 00
Bonds issued,	7,700 00
Notes payable,	900 00
Unpaid bills,	1,999 65
Interest due but not paid,	435 00

Total liabilities, as per books of the Company,	\$27,034 65
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JAMAICA PLAIN GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	\$265,160 75
Machinery and manufacturing appliances,				
Street mains,				
Meters,				
Cash on hand,				11,735 04
Due for gas,				218 76
Other accounts due the Company,				232 98
Coal on hand,				4,338 16
Coke on hand,				250 00
Other materials on hand,				2,897 44
Notes receivable,				500 00
Total assets, as per books of the Company,				\$285,333 13

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	.	\$200,000	00
Notes payable,	.	.	.	.	.	.	.	.	.	.	40,000	00
Deposits,	.	.	.	.	.	.	.	.	.	.	50	00
												<hr/>	
Total liabilities, as per books of the Company,	.	.	.	.	.	.	.	.	.	.	\$240,050	00
Profit and loss balance,	.	.	.	.	.	.	.	.	.	.	45,283	13
												<hr/>	
												\$285,333	13

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$43,172 20
Balance of manufacturing account,		17,948 84
Other items of income,		2,079 00
Dividends declared,	\$16,000 00	
Interest paid,	1,916 91	
Balance June 30, 1888,	45,283 13	
	\$63,200 04	\$63,200 04

LAWRENCE GAS COMPANY.

ASSETS.

Real estate,	}	. . . . .	. \$400,000 00
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			3,896 56
Due for gas,			5,559 00
Other accounts due the Company,			54 99
Coal on hand,			7,621 79
Coke on hand,			1,150 00
Tar and ammonia on hand,			1,978 35
Enrichers on hand,			2,369 27
Purifying materials on hand,			950 00
Other materials on hand,			7,649 63
Stoves and fixtures on hand,			7,083 12
Suspense account,			32,589 33
Gas on hand,			344 68
Electric construction,			43,504 48
Electric supplies,			684 99
Investments,			402 42
Total assets, as per books of the Company,			\$515,838 61

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	.	\$425,000	00
Notes payable,	.	.	.	.	.	.	.	.	.	.	56,000	00
Deposits,	.	.	.	.	.	.	.	.	.	.	24	00
												<hr/>	
Total liabilities, as per books of the Company,.	.	.	.	.	.	.	.	.	.	.	\$481,024	00
Profit and loss balance,	.	.	.	.	.	.	.	.	.	.	34,814	61
												<hr/>	
												\$515,838	61

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$27,202 25
Balance of manufacturing account,		34,560 54
Premium on sales of new stock,		6,610 00
Balance of electric light account,		1,888 54
Rents,		927 98
Other items of income,		37 27
Dividends declared,	\$33,000 00	
Interest paid,	3,411 97	
Balance June 30, 1888,	34,814 61	
	\$71,226 58	\$71,226 58

LEXINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,514 95
Machinery and manufacturing appliances,	21,405 21
Street mains,	6,499 40
Meters,	533 19
Cash on hand,	452 59
Due for gas,	632 75
Other accounts due the Company,	9 00
Coal on hand,	3 50
Tar on hand,	5 00
Enrichers on hand,	29 50
Other materials on hand,	152 82
Notes receivable,	546 00

Total assets, as per books of the Company, \$31,783 91

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	2,770 00
Unpaid bills,	287 77
Interest due but not paid,	13 50

Total liabilities, as per books of the Company, . . . \$23,071 27

Profit and loss balance, 8,712 64

\$31,783 91

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$7,571 01
Balance of manufacturing account,		1,297 53
Interest received,		11 10
Rents,		10 00
Interest paid,	\$177 00	
Balance June 30, 1888,	8,712 64	
	<u>\$8,889 64</u>	<u>\$8,889 64</u>

LOWELL GAS LIGHT COMPANY.

ASSETS.

Real estate,	. . . . .	\$75,000 00
Machinery and manufacturing appliances	}	. . . . . 425,000 00
Street mains,		
Meters,		
Cash on hand,	. . . . .	13,110 01
Coal on hand,	. . . . .	4,750 00
Coke on hand,	. . . . .	116 00
Enrichers on hand,	. . . . .	294 00
Purifying materials on hand,	. . . . .	180 00
Stoves on hand,	. . . . .	6,507 00

Total assets, as per books of the Company, . . . \$524,957 01

LIABILITIES.

Capital stock, \$500,000 00

Total liabilities, as per books of the Company, . . . \$500,000 00

Profit and loss balance, 24,957 01

\$524,957 01

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 38, 1887,		\$110,018 55
Balance of manufacturing account,		80,621 79
Rents,		2,213 53
Dividends declared,	\$60,000 00	
Interest paid,	1,255 15	
Construction charged off,	106,498 56	
Other items,	143 15	
Balance June 30, 1888,	24,957 01	
	\$192,853 87	\$192,853 87

LYNN GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$180,000 00
Machinery and manufacturing appliances, }	120,000 00
Street mains,	
Cash on hand,	2,682 63
Due for gas,	13,356 74
Other accounts due the Company,	425 19
Coal on hand,	4,645 19
Tar on hand,	175 00
Other materials on hand,	1,274 23
Stoves on hand,	88 66
Notes receivable,	30,400 00

Total assets, as per books of the Company, . . . \$353,047 64

LIABILITIES.

Capital stock,	\$300,000 00
Unpaid bills,	234 59
Deposits,	34 47

Total liabilities, as per books of the Company, . . . \$300,269 06
 Profit and loss balance, 52,778 58

\$353,047 64

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$46,016 47
Balance of manufacturing account,		29,705 44
Interest received,		1,369 60
Rents,		1,523 75
Dividends declared,	\$18,000 00	
Construction charged off,	7,836 68	
Balance June 30, 1888,	52,778 58	
	<hr/>	<hr/>
	\$78,615 26	\$78,615 26

MALDEN AND MELROSE GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		\$230,154 60
Meters,		1,648 97
Cash on hand,		6,351 21
Due for gas,		10,540 62
Other accounts due the Company,		2,330 12
Coal on hand,		2,347 51
Tar on hand,		390 00
Fixtures on hand,		3,663 27
Pipe account, extensions, etc.,		4,801 79
Total assets, as per books of the Company,		\$262,228 09

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	.	\$170,000 00
Bonds issued,	.	.	.	.	.	.	.	.	.	.	50,000 00
Notes payable,	.	.	.	.	.	.	.	.	.	.	800 00
Deposits,	.	.	.	.	.	.	.	.	.	.	5 00
Unpaid dividends,	.	.	.	.	.	.	.	.	.	.	892 50
											<hr/>
Total liabilities, as per books of the Company,	.	.	.	.	.	.	.	.	.	.	\$221,697 50
Profit and loss balance,	.	.	.	.	.	.	.	.	.	.	40,530 59
											<hr/>
											\$262,228 09

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$26,348 74
Balance of manufacturing account,		26,572 74
Interest received,		7 68
Rents,		183 33
Other items of income,		766 60
Dividends declared,	\$10,200 00	
Interest paid,	3,148 50	
Balance June 30, 1888,	40,530 59	
	\$53,879 09	\$53,879 09

MANUFACTURERS' GAS LIGHT COMPANY (FALL RIVER).

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		\$49,804 99
Meters,		
Cash on hand,		886 98
Due for gas,		421 23
Coal on hand,		500 00
Coke on hand,		35 00
Tar on hand,		50 00
Stoves and lamps on hand,		111 15
Total assets, as per books of the Company,		<u>\$51,809 35</u>

LIABILITIES.

Capital stock,	. . . . .	\$50,000 00
		<hr/>
Total liabilities, as per books of the Company,	. . . . .	\$50,000 00
Profit and loss balance,	. . . . .	1,809 35
		<hr/>
		\$51,809 35

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$633 89
Balance of manufacturing account,		6,433 92
Rents,		120 00
Dividends declared,	\$5,000 00	
Interest paid,	41 63	
Other items,	336 83	
Balance June 30, 1888,	1,809 35	
		<u>\$7,187 81</u>
		<u>\$7,187 81</u>

MARBLEHEAD GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$5,413 33
Machinery and manufacturing appliances, }	22,647 00
Street mains, }	
Meters,	1,607 25
Cash on hand,	293 80
Due for gas,	610 72
Other accounts due the Company,	39 46
Coal on hand,	1,370 05
Other materials on hand,	65 00
Stoves on hand,	55 00
Office furniture,	200 00
Investments,	106 25

Total assets, as per books of the Company,	\$32,407 86
Profit and loss balance,	11,302 87

\$43,710 73

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	2,000 00
Unpaid bills,	1,710 73

Total liabilities, as per books of the Company,	\$43,710 73
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,	\$11,384 23	
Balance of manufacturing account,		\$2,337 94
Interest received,		12 00
Rents,		150 00
Other items of income,		94 64
Dividends declared,	2,400 00	
Interest paid,	113 22	
Balance June 30, 1888,		11,302 87
	<hr/>	<hr/>
	\$13,897 45	\$13,897 45

MARLBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$5,590 00
Machinery and manufacturing appliances,	59,576 01
Street mains,	824 72
Meters,	1,089 90
Cash on hand,	1,190 88
Due for gas,	1,486 24
Other accounts due the Company,	249 35
Tar on hand,	58 00
Other materials on hand,	50 00
Notes receivable,	100 00

Total assets, as per books of the Company, \$70,215 10

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	620 15
Unpaid bills,	364 90

Total liabilities, as per books of the Company, . . . \$50,985 05

Profit and loss balance, 19,230 05

\$70,215 10

MILLER'S RIVER GAS LIGHT COMPANY (ATHOL).

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		50 79
Due for gas,		834 26
Other accounts due the Company,		20 75
Coal on hand,		45 00
Enrichers on hand,		30 00
Purifying materials on hand,		55 00
Other materials on hand,		160 00
		<hr/>
Total assets, as per books of the Company,		\$62,439 21
Profit and loss balance,		3,753 78
		<hr/>
		\$66,192 99

LIABILITIES.

Capital stock,	\$40,000 00
Bonds issued,	20,000 00
Notes payable,	1,671 37
Unpaid bills,	8 70
Other amounts due from the Company,	4,512 92
	<hr/>
Total liabilities, as per books of the Company,	\$66,192 99

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,	\$4,312 94	
Balance of manufacturing account,		\$1,788 78
Interest paid,	1,229 62	
Balance June 30, 1888,		3,753 78
		<hr/>
	\$5,542 56	\$5,542 56

MUTUAL GAS LIGHT COMPANY OF SOUTHBRIDGE.

ASSETS.

Real estate,	\$5,515 49
Machinery and manufacturing appliances,	1,041 83
Street mains,	6,837 25
Meters,	1,038 40
Cash on hand,	300 67
Due for gas,	197 60
Other accounts due the Company,	420 24
Coal on hand,	29 00
Enrichers on hand,	182 75
Other materials on hand,	275 08
Fixtures on hand,	77 61
<hr/>	
Total assets, as per books of the Company,	\$15,915 92

LIABILITIES.

Capital stock,	\$15,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$15,000 00
Profit and loss balance,	915 92
<hr/>	
	\$15,915 92

NANTUCKET GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,000 00
Machinery and manufacturing appliances,	20,000 00
Street mains,	9,390 57
Meters,	4,000 00
Cash on hand,	260 19
Due for gas,	543 63
Other accounts due the Company,	416 66
Coal on hand,	751 50
Coke on hand,	20 00
Tar on hand,	8 00
Purifying materials on hand,	6 00
Notes receivable,	2,000 00
Investments,	368 00
<hr/>	
Total assets, as per books of the Company,	\$40,764 55

LIABILITIES.

Capital stock,	\$36,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$36,000 00
Profit and loss balance,	4,764 55
<hr/>	
	\$40,764 55

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$4,249 97
Balance of manufacturing account,		1,831 48
Interest received,		139 10
Other items of income,		34 00
Dividends declared,	\$1,440 00	
Other items,	50 00	
Balance June 30, 1888,	4,764 55	
<hr/>		
	\$6,254 55	\$6,254 55

NATICK GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$16,500 00
Machinery and manufacturing appliances, }	21,178 94
Street mains, }	
Meters, }	
Cash on hand,	1,447 69
Due for gas,	1,802 88
Coal on hand,	239 50
Coke on hand,	2 34
Tar on hand,	12 00
Other materials on hand,	113 78
Stoves and fixtures on hand,	577 53
<hr/>	
Total assets, as per books of the Company,	\$41,874 66

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	9,500 00
<hr/>	
Total liabilities, as per books of the Company,	\$29,500 00
Profit and loss balance,	12,374 66
<hr/>	
	\$41,874 66

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$11,425 67
Balance of manufacturing account,		3,251 54
Dividends declared,	\$1,600 00	
Interest paid,	441 12	
Other items,	261 43	
Balance June 30, 1888,	12,374 66	
<hr/>		<hr/>
	\$14,677 21	\$14,677 21

NEW BEDFORD GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	.	.	.	.	\$161,164	08
Machinery and manufacturing appliances,							
Street mains,	.	.	.	.	.	118,440	47
Meters,	.	.	.	.	.	32,743	17
Cash on hand,	.	.	.	.	.	641	25
Due for gas,	.	.	.	.	.	7,338	62
Other accounts due the Company,	.	.	.	.	.	3,621	52
Coal on hand,	.	.	.	.	.	6,451	00
Tar on hand,	.	.	.	.	.	460	00
Purifying materials on hand,	.	.	.	.	.	529	00
Other materials on hand,	.	.	.	.	.	748	30
Stoves on hand,	.	.	.	.	.	10,615	79
Fixtures on hand,	.	.	.	.	.	10,110	51
Electric account,	.	.	.	.	.	92,209	47
Investments,	.	.	.	.	.	2,275	50
Total assets, as per books of the Company,						\$447,348	68

LIABILITIES.

[illegible]

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$5,762 55
Balance of manufacturing account,		26,470 88
Premium on sale of new stock,		12,500 00
Balance of electric manufacturing account,		1,930 79
Dividends declared,	\$23,500 00	
Interest paid,	4,746 71	
Other items,	496 65	
Balance June 30, 1888,	17,920 86	
	<u>\$46,664 22</u>	<u>\$46,664 22</u>

NEWBURYPORT GAS COMPANY.

ASSETS.

Real estate,	\$1,132 43
Machinery and manufacturing appliances,	75,000 00
Street mains,	4,215 81
Meters,	1,034 82
Cash on hand,	2,486 86
Due for gas,	2,504 10
Other accounts due the Company,	212 09
Coal on hand,	1,429 00
Tar on hand,	42 50
Enrichers on hand,	23 00
Purifying materials on hand,	68 00
Other materials on hand,	223 00
Lungren lamps on hand,	122 00
Fixtures on hand,	150 00
Hay,	21 00
Notes receivable,	3,318 75

Total assets, as per books of the Company,	\$91,983 36
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LIABILITIES.

Capital stock,	\$80,000 00
Unpaid dividends,	247 50

Total liabilities, as per books of the Company,	\$80,247 50
Profit and loss balance,	11,735 86

\$91,983 36

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$10,637 56
Balance of manufacturing account,		7,828 60
Interest received,		204 17
Dividends declared,	\$6,400 00	
Other items,	534 47	
Balance June 30, 1888,	11,735 86	
	<hr/>	<hr/>
	\$18,670 33	\$18,670 33

NEWTON AND WATERTOWN GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . . .	\$278,587 34
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			12,103 98
Due for gas,			16,657 40
Other accounts due the Company,			2,220 91
Coal on hand,			3,631 24
Coke on hand,			45 00
Tar on hand,			500 00
Purifying materials on hand,			50 00
Other materials on hand,			1,779 00
Stoves and fixtures on hand,			2,193 17
Office furniture,			777 40
Notes receivable,			619 71
Investments,			13,895 27
Total assets, as per books of the Company,			\$333,060 42

LIABILITIES.

Capital stock,	\$200,000 00
Unpaid bills,	14 37
Deposits,	35 00
Unpaid dividends,	852 00
Contingent account,	25,000 00

Total liabilities, as per books of the Company,	\$225,901 37
Profit and loss balance,	107,159 05

\$333,060 42

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$92,187 25
Balance of manufacturing account,		28,996 50
Interest received,		172 44
Rents,		1,485 00
Other items of income,		401 76
Dividends declared,	\$16,000 00	
Interest paid,	52 50	
Other items,	31 40	
Balance June 30, 1888,	107,159 05	
	<hr/>	<hr/>
	\$123,242 95	\$123,242 95

NORTH ADAMS GAS LIGHT COMPANY.

ASSETS.

[illegible]

Total assets, as per books of the Company, . . . \$73,012 06

LIABILITIES.

[illegible]

Total liabilities, as per books of the Company,	\$58,000 00
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Profit and loss balance,	15,012 06
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\$73,012 06

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$11,391 83
Balance of manufacturing account,		7,720 23
Dividends declared,	\$4,000 00	
Interest paid,	100 00	
Balance June 30, 1888,	15,012 06	
	<hr/>	<hr/>
	\$19,112 06	\$19,112 06

NORTHAMPTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$25,000 00
Machinery and manufacturing appliances,	3,000 00
Street mains,	20,000 00
Cash on hand,	3,566 15
Due for gas,	1,614 35
Other accounts due the Company,	442 62
Coal on hand,	458 44
Coke on hand,	124 80
Tar on hand,	150 00
Enrichers on hand,	620 00
Purifying materials on hand,	89 44
Other materials on hand,	1,132 95
Spent lime,	20 00
Investments,	3,250 00

Total assets, as per books of the Company, . . . \$59,468 75

LIABILITIES.

Capital stock,	\$50,000 00
Reserved fund,	5,418 50

Total liabilities, as per books of the Company, . . \$55,418 50

Profit and loss balance, 4,050 25

\$59,468 75

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$8,922 20
Balance of manufacturing account,		4,691 53
Interest received,		345 93
Rents,		225 00
Other items of income,		64 40
Dividends declared,	\$4,000 00	
Construction charged off,	1,188 06	
Depreciation,	5,000 00	
Other items,	10 75	
Balance June 30, 1888,	4,050 25	
	<u>\$14,249 06</u>	<u>\$14,249 06</u>

NORTH ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$47,474 72
Machinery and manufacturing appliances,	28,550 20
Street mains,	40,064 81
Meters,	5,303 91
Cash on hand,	14,331 50
Due for gas,	1,496 30
Other accounts due the Company,	329 04
Coal on hand,	1,855 36
Coke on hand,	4 35
Tar on hand,	14 65
Enrichers on hand,	75
Purifying materials on hand,	72 16
Other materials on hand,	82 97
Stoves on hand,	229 16
Fixtures on hand,	1,402 81
Office furniture,	350 00
Notes receivable,	11,000 00
Total assets, as per books of the Company,	<u>\$152,562 69</u>

LIABILITIES.

Capital stock,	\$68,100 00
Bonds issued (dividend scrip),	68,100 00
Unpaid bills,	101 17
Unpaid dividends,	2,724 00
Interest due but not paid,	1,021 50
Total liabilities, as per books of the Company,	<u>\$140,046 67</u>
Profit and loss balance,	12,516 02
	<u>\$152,562 69</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$10,186 30
Balance of manufacturing account,		11,329 95
Interest received,		746 49
Rents,		288 00
Other items of income,		48 88
Dividends declared,	\$5,448 00	
Interest paid,	4,086 00	
Other items,	549 60	
Balance June 30, 1888,	12,516 02	
	<u>\$22,599 62</u>	<u>\$22,599 62</u>

NORWOOD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,000 00
Machinery and manufacturing appliances, }	8,000 00
Street mains, }	
Meters,	802 65
Cash on hand,	1,742 78
Due for gas,	974 70
Coal on hand,	52 50
Tar on hand,	45 00

Total assets, as per books of the Company, . . . \$14,617 63

LIABILITIES.

Capital stock,	\$12,000 00
Unpaid bills,	900 65

Total liabilities, as per books of the Company, . . \$12,900 65

Profit and loss balance, 1,716 98

\$14,617 63

PITTSFIELD COAL GAS COMPANY.

ASSETS.

Real estate,	\$22,500 00
Machinery and manufacturing appliances,	14,350 00
Street mains,	19,110 00
Meters,	6,540 00
Cash on hand,	6,353 20
Due for gas,	3,315 46
Coal on hand,	500 00
Enrichers on hand,	700 00
Purifying materials on hand,	100 00
Stoves on hand,	25 00
Notes receivable,	33,310 45
Investments,	3,550 00

Total assets, as per books of the Company, . . . \$110,354 11

LIABILITIES.

Capital stock,	\$62,500 00
Unpaid bills,	2,000 00
Reserved fund,	40,000 00

Total liabilities, as per books of the Company, . . . \$104,500 00

Profit and loss balance, 5,854 11

\$110,354 11

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$6,499 99
Balance of manufacturing account,		8,485 48
Interest received,		732 54
Rents,		136 10
Dividends declared,	\$10,000 00	
Balance June 30, 1888,	5,854 11	
	<u>\$15,854 11</u>	<u>\$15,854 11</u>

PROFIT AND LOSS ACCOUNT.

ROXBURY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$116,365 91
Machinery and manufacturing appliances,	293,266 45
Street mains,	228,321 92
Meters,	47,506 96
Cash on hand,	171,138 07
Due for gas,	25,148 30
Other accounts due the Company,	3,997 51
Coal on hand,	7,159 94
Enrichers on hand,	43 12
Purifying materials on hand,	580 00
Other materials on hand,	4,984 51
Notes receivable,	111,000 00
<hr/>	
Total assets, as per books of the Company,	\$1,009,512 69

LIABILITIES.

Capital stock,	\$600,000 00
Unpaid bills,	602 18
Deposits,	2,765 00
Reserved fund,	125,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$728,367 18
Profit and loss balance,	281,145 51
<hr/>	
	\$1,009,512 69

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$242,790 57
Balance of manufacturing account,		101,351 80
Interest received,		5,553 16
Rents,		1,449 98
Dividends declared,	\$60,000 00	
Carried to reserve fund,	10,000 00	
Balance June 30, 1888,	281,145 51	
<hr/>		<hr/>
	\$351,145 51	\$351,145 51

SALEM GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . . .	\$255,174 11
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			71,296 11
Due for gas,			11,103 72
Other accounts due the Company,			632 25
Coal on hand,			4,866 38
Tar on hand,			750 00
Enrichers on hand,			1,390 73
Purifying materials on hand,			375 00
Other materials on hand,			2,755 09
New purifying and retort houses, etc.,			41,051 14
Horses, wagons, etc.,			850 00
Office furniture,			200 00
Notes receivable,			3,000 00
Investments,			5,285 25
Total assets, as per books of the Company,			\$398,729 78

LIABILITIES.

Capital stock,	\$300,000 00
Deposits,	405 00
Depreciation fund,	20,000 00
Amounts due from the Company not included above,	3,023 02
<hr/>	
Total liabilities, as per books of the Company,	\$323,428 02
Profit and loss balance,	75,301 76
<hr/>	
	\$398,729 78

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$68,868 12
Balance of manufacturing account,		24,146 08
Interest received,		3,124 22
Rents,		309 25
Dividends declared,	\$18,000 00	
Depreciation fund,	535 24	
Other items,	2,610 67	
Balance June 30, 1888,	75,301 76	
		\$96,447 67
		\$96,447 67

SOUTH BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$200,945 76
Machinery and manufacturing appliances, }	242,324 84
Street mains,	
Meters,	17,230 96
Cash on hand,	4,253 15
Due for gas,	8,856 94
Other accounts due the Company,	1,360 86
Coal on hand,	905 35
Enrichers on hand,	212 41
Purifying materials on hand,	282 00
Other materials on hand,	285 15
Stoves on hand,	592 51
Burners on hand,	5 84
Horses, wagons, etc.,	915 00
Gas on hand,	153 68
Investments,	26,000 00

Total assets, as per books of the Company, \$504,324 45

LIABILITIES.

Capital stock,	\$440,000 00
Notes payable,	10,000 00
Unpaid bills,	249 26
Deposits,	1,559 95
Amounts due from the Company not included above,	574 89

Total liabilities, as per books of the Company, . . . \$452,384 10
 Profit and loss balance, 51,940 35

\$504,324 45

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$29,767 26
Balance of manufacturing account,		43,156 07
Rents,		1,652 16
Dividends declared,	\$17,600 00	
Construction charged off,	1,705 43	
Depreciation,	470 85	
Other items,	2,858 86	
Balance June 30, 1888,	51,940 35	
	<hr/>	<hr/>
	\$74,575 49	\$74,575 49

SPENCER GAS COMPANY.

ASSETS.

Real estate,	\$21,428 78
Machinery and manufacturing appliances,	70,767 54
Street mains,	31,984 84
Meters,	2,488 18
Due for gas,	3,135 35
Other accounts due the Company,	5,348 13
Coal on hand,	1,470 00
Coke on hand,	120 00
Tar on hand,	36 00
Enrichers on hand,	28 98
Purifying materials on hand,	12 00
Other materials on hand,	2,381 39
Stoves on hand,	1,377 54
Fixtures on hand,	1,622 24
Office furniture,	140 00
Electric-light plant,	23,191 00
Gas engine,	600 00

Total assets, as per books of the Company,	\$166,131 97
Profit and loss balance,	2,860 20

\$168,992 17

LIABILITIES.

Capital stock,	\$85,000 00
Bonds issued,	75,000 00
Unpaid bills,	4,492 17
Interest due but not paid,	4,500 00

Total liabilities, as per books of the Company,	\$168,992 17
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SPRINGFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$84,625 80
Machinery and manufacturing appliances,	297,376 45
Street mains and services,	193,461 59
Meters,	26,484 05
Cash on hand,	3,930 93
Due for gas,	3,709 84
Other accounts due the Company,	8,927 74
Coal on hand,	11,160 13
Enrichers on hand,	547 21
Purifying materials on hand,	254 12
Gas engine and burners on hand,	1,400 74
Stoves on hand,	874 08
Horses, wagons, etc.,	2,500 00
Office furniture,	1,275 00
Notes receivable,	1,188 17
Steam,	97,219 37
Steam fittings,	3,868 80
Total assets, as per books of the Company,	<u>\$738,804 02</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	58,000 00
Unpaid bills,	12,634 45
Deposits,	606 75
Unpaid dividends,	1,645 00
Steam heating,	29,698 74
Total liabilities, as per books of the Company,	<u>\$602,584 94</u>
Profit and loss balance,	136,219 08
	<u>\$738,804 02</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$126,828 93
Balance of manufacturing account,		49,678 84
Interest received,		128 57
Rents,		1,584 02
Dividends declared,	\$40,000 00	
Interest paid,	2,001 28	
Balance June 30, 1888,	136,219 08	
	<u>\$178,220 36</u>	<u>\$178,220 36</u>

TAUNTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$26,500 00
Machinery and manufacturing appliances,	56,337 28
Cash on hand,	10,246 11
Due for gas,	8,245 26
Other accounts due the Company,	3,995 97
Coal on hand,	1,623 50
Coke on hand,	14 00
Tar on hand,	425 00
Enrichers on hand,	12 80
Purifying materials on hand,	352 80
Other materials on hand,	203 00
Stoves and Lungren lamps on hand,	3,028 27
Fixtures on hand,	2,305 72

Total assets, as per books of the Company, . . . \$113,289 71

LIABILITIES.

Capital stock,	\$80,000 00
Deposits,	131 00

Total liabilities, as per books of the Company, . . . \$80,131 00
Profit and loss balance, 33,158 71

\$113,289 71

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$24,559 40
Balance of manufacturing account,		21,721 02
Rents,		210 00
Other items of income,		428 34
Dividends declared,	\$8,000 00	
Interest paid,	4 74	
Construction charged off,	5,755 31	
Balance June 30, 1888,	33,158 71	
	\$46,918 76	\$46,918 76

WALTHAM GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$24,305 78
Machinery and manufacturing appliances,	79,964 06
Street mains,	41,382 44
Meters,	5,150 00
Cash on hand,	588 59
Due for gas,	6,335 30
Other accounts due the Company,	2,223 48
Coal on hand,	6,014 50
Coke on hand,	5 00
Tar on hand,	705 50
Enrichers on hand,	29 64
Purifying materials on hand,	341 00
Other materials on hand,	2,322 88
Stoves on hand,	183 81
Fixtures on hand,	1,074 07
Horses, wagons, etc.,	1,004 00
Office furniture,	750 98
Electric light plant,	27,316 29

Total assets, as per books of the Company, . . . \$199,697 32

LIABILITIES.

Capital stock,	\$140,000 00
Bonds issued,	20,000 00
Notes payable,	8,000 00

Total liabilities, as per books of the Company, . . . \$168,000 00

Profit and loss balance, 31,697 32

\$199,697 32

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$21,435 58
Balance of manufacturing account,		17,838 70
Balance of electric light manufacturing account,		2,324 51
Other items of income,		718 99
Dividends declared,	\$8,400 00	
Interest paid,	1,606 27	
Depreciation,	614 19	
Balance June 30, 1888,	31,697 32	
	\$42,317 78	\$42,317 78

WESTFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$2,430 00
Machinery and manufacturing appliances,	29,691 17
Street mains,	13,250 71
Meters,	1,160 93
Cash on hand,	3,950 29
Due for gas,	2,798 53
Other accounts due the Company,	1,605 16
Coal on hand,	1,643 01
Enrichers on hand,	328 71
Purifying materials on hand,	15 58
Fixtures on hand,	181 35
Electric light plant,	19,078 44

Total assets, as per books of the Company, \$76,133 88

LIABILITIES.

Capital stock,	\$54,000 00
Notes payable,	16,000 00

Total liabilities, as per books of the Company, . . . \$70,000 00
 Profit and loss balance, 6,133 88
 \$76,133 88

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$4,276 51
Balance of manufacturing account,		6,081 97
Interest received,		95 40
Dividends declared,	\$4,320 00	
Balance June 30, 1888,	6,133 88	
	<u>\$10,453 88</u>	<u>\$10,453 88</u>

WOBURN GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$9,706 17
Machinery and manufacturing appliances,	30,911 21
Street mains,	27,006 54
Meters,	3,102 05
Cash on hand,	2,436 63
Due for gas,	1,778 70
Other accounts due the Company,	419 90
Coal on hand,	2,900 00
Enrichers on hand,	100 00
Other materials on hand,	135 00
Fixtures and Lungren lamps on hand,	246 76
Office furniture,	125 00
Notes receivable,	7,500 00

Total assets, as per books of the Company, . . . \$86,367 96

LIABILITIES.

Capital stock,	\$45,100 00
Unpaid bills,	79 90
Deposits,	5 00

Total liabilities, as per books of the Company, . . \$45,184 90
 Profit and loss balance, 41,183 06

\$86,367 96

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1887,		\$39,841 82
Balance of manufacturing account,		4,213 61
Interest received,		334 00
Other items of income,		401 63
Dividends declared,	\$3,608 00	
Balance June 30, 1888,	41,183 06	
	<hr/>	<hr/>
	\$44,791 06	\$44,791 06

WORCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$126,000 00
Machinery and manufacturing appliances,	165,716 35
Street mains,	233,816 91
Meters,	14,272 47
Cash on hand,	8,892 20
Due for gas,	745 25
Coal on hand,	5,946 60
Coke on hand,	225 00
Tar on hand,	1,900 00
Enrichers on hand,	467 25
Purifying materials on hand,	40 00
Stoves and fixtures on hand,	450 00
Investments,	4,052 50

Total assets, as per books of the Company, . . . \$562,524 53

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	25,000 00
Unpaid dividends,	7,569 00

Total liabilities, as per books of the Company, . . . \$532,569 00

Profit and loss balance, 29,955 53

\$562,524 53

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1887,		\$42,782 66
Balance of manufacturing account,		44,470 77
Interest received,		1,351 57
Other items of income,		114 36
Dividends declared,	\$30,000 00	
Interest paid,	1,726 47	
Construction charged off,	6,000 00	
Depreciation fund,	20,655 46	
Other items,	381 90	
Balance June 30, 1888,	29,955 53	
	<u>\$88,719 36</u>	<u>\$88,719 36</u>

APPENDIX B.

BALANCE SHEETS ELECTRIC LIGHT COMPANIES, JUNE 30, 1888.

BEVERLY ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$800 00
Steam plant,	2,125 00
Electric plant,	5,600 00
Lines, meters, lamps and globes,	4,250 00
Cash on hand,	288 71
Carbons on hand,	13 00
Oil and waste on hand,	20 00
<hr/>	
Total assets, as per books of the Company,	\$13,096 71

LIABILITIES.

Capital,	\$8,000 00
Unpaid bills,	3,275 00
<hr/>	
Total liabilities, as per books of the Company,	\$11,275 00
Profit and loss balance,	1,821 71
<hr/>	
	\$13,096 71

BOSTON ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$69,295 45
Steam plant,	177,298 40
Electric plant,	215,799 33
Lines, meters, lamps and globes,	607,643 86
Cash on hand,	5,449 53
Due for light and power,	23,974 05
Other accounts due the Company,	4,180 08
Fuel on hand,	6,512 50
Carbons on hand,	1,522 53

Oil and waste on hand,	\$117 90
Incandescent lamps on hand,	2,036 10
Globes on hand,	1,140 50
Other materials on hand,	16,444 61
Motors on hand,	1,522 50
Horses, wagons, etc.,	739 39
Office furniture,	1,851 22

Total assets, as per books of the Company, . . . \$1,135,527 95

LIABILITIES.

Capital stock,	\$870,000 00
Bonds issued,	131,000 00
Notes payable,	58,159 48
Unpaid bills,	10,447 47
Interest due but not paid,	2,462 79

Total liabilities, as per books of the Company, . . . \$1,072,069 74

Profit and loss balance, 63,458 21

\$1,135,527 95

CAMBRIDGE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$4,050 10
Steam plant,	21,023 65
Electric plant,	24,780 61
Lines, meters, lamps and globes,	53,318 17
Cash on hand,	5,083 24
Due for light and power,	270 32
Other accounts due the Company,	20,537 78
Franchise,	15,000 00

Total assets, as per books of the Company, . . . \$144,063 87

Profit and loss balance, 10,849 87

\$154,913 74

LIABILITIES.

Capital stock,	\$100,000 00
Bonds issued,	26,000 00
Notes payable,	25,643 54
Unpaid bills,	2,490 20
Interest due, but not paid,	780 00

Total liabilities, as per books of the Company, . . . \$154,913 74

CHICOPEE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$2,001 00
Steam plant,	3,195 32
Electric plant,	2,673 96
Lines, meters, lamps and globes,	4,839 94
Cash on hand,	16 39
Other accounts due the Company,	272 69
Carbons on hand,	22 00

Total assets, as per books of the Company, . . . \$13,021 30

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	2,300 00
Unpaid bills,	540 00

Total liabilities, as per books of the Company, . . . \$12,840 00
 Profit and loss balance, 181 30

\$13,021 30

EDISON ELECTRIC ILLUMINATING COMPANY OF BOSTON.

ASSETS.

Real estate,	}	. . . . .	\$628,354 04
Steam plant,			
Electric plant,			
Patent rights,			
Lines, meters, lamps and globes,			
Cash on hand,			1,615 94
Due from customers,			15,085 23
Other accounts due the Company,			23,757 12
Stock on hand of every description,			12,581 24

Total assets, as per books of the Company, . . . \$681,393 59

LIABILITIES.

Capital stock,	\$500,000 00
Bonds issued,	150,000 00
Unpaid bills,	8,867 23
Amounts due from the Company, not included above,	2,371 80

Total liabilities, as per books of the Company, . . . \$661,239 03
 Profit and loss balance, 20,154 54

\$681,393 57

EDISON ELECTRIC ILLUMINATING COMPANY OF BROCKTON.

ASSETS.

Real estate,	\$29,155 84
Steam plant,	26,137 32
Electric plant,	15,343 84
Patent rights,	16,500 00
Lines, meters, lamps and globes,	37,951 01
Cash on hand,	6 81
Due for light and power,	4,245 11
Other accounts due the Company,	905 03
Fuel on hand,	1,389 52
Carbons on hand,	
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	
Other materials on hand,	
Motors on hand,	495 64
Office furniture,	200 00
Arc system,	31,491 42
Sundries,	7,673 71
<hr/>	
Total assets, as per books of the Company,	\$171,495 25

LIABILITIES.

Capital stock,	\$71,000 00
Bonds issued,	80,000 00
Notes payable,	12,218 10
Interest due but not paid,	2,177 78
Reserved fund,	6,099 37
<hr/>	
Total liabilities, as per books of the Company,	\$171,495 25

EDISON ELECTRIC ILLUMINATING COMPANY OF FALL RIVER.

ASSETS.

Real estate,	\$4,500 00
Steam plant,	11,000 00
Electric plant,	17,000 00
Patent rights,	27,000 00
Lines, meters and lamps,	34,124 82
Cash on hand,	1,906 20
Due for light and power,	

Other accounts due the Company,	}	
Fuel on hand,		
Oil and waste on hand,		
Incandescent lamps on hand,		
Other materials on hand,		
Motors on hand,		
Fixtures on hand,		
Horses, wagons, etc.,		
Office furniture,		
		\$3,431 83

Total assets, as per books of the Company, . . . \$98,962 85

LIABILITIES.

Capital stock,	\$81,600 00
Bonds issued,	7,800 00
Unpaid bills,	5,998 34

Total liabilities, as per books of the Company, . . . \$95,398 34

Profit and loss balance, 3,564 51

\$98,962 85

EDISON ELECTRIC ILLUMINATING COMPANY OF LAWRENCE.

ASSETS.

Construction account,	\$74,768 72
Cash on hand,	45 81
Due for light and power,	1,604 69
Other accounts due the Company,	285 52
Fuel on hand,	169 98
Oil and waste on hand,	116 60
Incandescent lamps on hand,	421 10
Other materials on hand,	2,346 48
Motors on hand,	2,589 45
Steam-heating plant,	2,626 04
Municipal plant,	14,792 89
Chimney,	2,211 93

Total assets, as per books of the Company, . . . \$101,979 21

Profit and loss balance, 222 73

\$102,201 94

LIABILITIES.

Capital stock,	\$65,000 00
Notes payable,	36,700 00
Unpaid bills,	501 94

Total liabilities, as per books of the Company, . . . \$102,201 94

EDISON ELECTRIC ILLUMINATING COMPANY OF
NEW BEDFORD.

ASSETS.

Real estate,	\$16,458 33
Steam plant,	29,185 51
Electric plant,	40,749 88
Patent rights,	22,500 00
Meters,	2,243 53
Cash on hand,	214 26
Due for light and power,	1,117 13
Other accounts due the Company,	2,740 58
Fuel on hand,	40 50
Oil and waste on hand,	31 69
Incandescent lamps on hand,	741 45
Other materials on hand,	3,040 07
Motors on hand,	3,265 00
Office furniture,	109 10
Notes receivable,	336 94
Sundry accounts,	753 75
Total assets, as per books of the Company,	<u>\$123,527 72</u>

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	20,500 00
Unpaid bills,	2,671 18
Total liabilities, as per books of the Company,	<u>\$123,171 18</u>
Profit and loss balance,	356 54
	<u>\$123,527 72</u>

ELECTRIC LIGHT AND PATENT FLOORING COMPANY,
AMESBURY.

ASSETS.

Real estate,	\$28,000 00
Steam plant,	5,000 00
Electric plant,	6,500 00
Patent rights,	4,000 00
Lines, meters, lamps and globes,	6,500 00
Wood-working machinery,	12,000 00
Lumber,	1,000 00
Notes receivable,	4,125 00
Total assets, as per books of the Company,	<u>\$67,125 00</u>
Profit and loss balance,	2,204 00
	<u>\$69,329 00</u>

LIABILITIES.

Capital stock,	\$28,400 00
Notes payable,	40,929 00
<hr/>	
Total liabilities, as per books of the Company,	\$69,329 00

FALL RIVER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$7,250 00
Steam plant,	12,743 14
Electric plant,	27,624 60
Patent rights,	8,000 00
Lines, poles and lamps,	13,090 44
Cash on hand,	5,852 19
<hr/>	
Total assets, as per books of the Company,	\$74,560 37

LIABILITIES.

Capital stock,	\$60,000 00
Notes payable,	12,726 47
<hr/>	
Total liabilities, as per books of the Company,	\$72,726 47
Profit and loss balance,	1,833 90
<hr/>	
	\$74,560 37

FRANKLIN ELECTRIC LIGHT COMPANY, TURNER'S FALLS.

ASSETS.

Electric plant,	\$5,020 00
Cash on hand,	25 15
Due for light and power,	150 00
Carbons on hand,	30 00
Oil and waste on hand,	10 00
Globes on hand,	25 00
<hr/>	
Total assets, as per books of the Company,	\$5,260 15

LIABILITIES.

Capital stock,	\$5,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$5,000 00
Profit and loss balance,	260 15
<hr/>	
	\$5,260 15

GREENFIELD ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Steam plant,	\$5,181 03
Electric plant,	16,688 96
Cash on hand,	272 00
Due for light and power,	636 37
Fuel on hand,	150 00
Oil and waste on hand,	44 40
Other materials on hand,	566 16
Suspense account,	363 27
<hr/>	
Total assets, as per books of the Company,	\$25,902 19
Profit and loss balance,	157 98
<hr/>	
	\$26,060 17

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	7,500 00
Unpaid bills,	3,560 17
<hr/>	
Total liabilities, as per books of the Company,	\$26,060 17

HAVERHILL ELECTRIC COMPANY.¹

ASSETS.

Real estate,	\$4,900 00
Steam plant,	16,200 00
Electric plant,	32,200 00
Lines, lamps and globes,	22,500 00
Supplies,	9,400 00
<hr/>	
Total assets, as per books of the Company,	\$85,200 00

LIABILITIES.

Capital stock,	\$85,000 00
<hr/>	
Total liabilities, as per books of the Company,	\$85,000 00
Profit and loss balance,	200 00
<hr/>	
	\$85,200 00

¹ Balance sheet as of December 1.

HOLYOKE ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	}	
Steam plant,		
Electric plant,		
Patent rights,		
Lines, meters, lamps and globes,		\$46,913 08
Cash on hand,		2,871 15
Due for light and power,		2,324 17
Carbons on hand,		245 20
Oil and waste on hand,		11 90
Globes on hand,		58 45
Other materials on hand,		25 00
Total assets, as per books of the Company,		\$52,448 95

LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	10,000 00
Unpaid dividends,	273 14
Reserved fund,	3,000 00
Total liabilities, as per books of the Company,	\$43,273 14
Profit and loss balance,	9,175 81
	\$52,448 95

HUDSON ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$1,365 77
Electric plant,	4,834 75
Lines, meters, lamps and globes,	5,845 05
Cash on hand,	154 19
Due for light and power,	925 62
Other accounts due the Company,	100 00
Investments. Stock in treasury,	8,975 00
Total assets, as per books of the Company,	\$22,200 38

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	5,000 00
Unpaid bills,	2,036 64
Total liabilities, as per books of the Company,	\$22,036 64
Profit and loss balance,	163 74
	\$22,200 38

LEICESTER ELECTRIC COMPANY.

ASSETS.

Electric plant,	\$5,502 32
Cash on hand,	387 85
Due for light and power,	169 88
Other accounts due the Company,	133 43

Total assets, as per books of the Company, . . . \$6,193 48

LIABILITIES.

Capital stock,	\$4,000 00
Unpaid bills,	1,794 61

Total liabilities, as per books of the Company, . . . \$5,794 61

Profit and loss balance, 398 87

\$6,193 48

LYNN ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$12,102 10
Steam plant,	8,546 10
Electric plant,	21,137 75
Patent rights,	15,000 00
Lines, meters, lamps and globes,	39,550 75
Cash on hand,	4,385 86
Due for light and power,	3,565 80
Carbons on hand,	249 70
Oil and waste on hand,	25 20
Construction. New works,	380 33
Globes on hand,	82 00

Total assets, as per books of the Company, . . . \$105,025 59

LIABILITIES.

Capital stock,	\$75,000 00
Bonds issued,	2,000 00
Notes payable,	1,400 00
Unpaid bills,	2,787 02
Interest due but not paid,	77 00

Total liabilities, as per books of the Company, . . . \$81,264 02

Profit and loss balance, 23,761 57

\$105,025 59

MALDEN ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	}	. . . . .	\$30,000 00
Electric plant,			
Lines, meters, lamps and globes,			
Cash on hand,		. . . . .	183 17
Other accounts due the Company,		. . . . .	2,463 14

Total assets, as per books of the Company, . . . \$32,646 31

LIABILITIES.

[illegible]

Total liabilities, as per books of the Company, . . . \$30,863 96

Profit and loss balance,	\$1,782 35
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\$32,646 31

MARLBOROUGH SCHUYLER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$2,500 00
Steam plant,	4,000 00
Electric plant,	20,020 25
Lines, meters, lamps and globes,	7,821 86
Cash on hand,	355 87
Due for light and power,	603 44
Fuel on hand,	307 40
Carbons on hand,	74 72
Oil and waste on hand,	43 35
Incandescent lamps on hand,	66 22
Globes on hand,	7 33

Total assets, as per books of the Company, . . . \$35,800 44

LIABILITIES.

[illegible]

Total liabilities, as per books of the Company, . . . \$34,052 03

Profit and loss balance,	1,748 41
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\$35,800 44

MIDDLESEX ELECTRIC LIGHT COMPANY (LOWELL).

ASSETS.	
Real estate,	\$34,469 37
Steam plant,	25,981 20
Electric plant,	149,803 37
Lines, meters, lamps and globes,	26,838 87
Cash on hand,	260 22
Due for light and power,	4,494 32
Fuel on hand,	144 00
Carbons on hand,	190 00
Oil and waste on hand,	16 50
Incandescent lamps on hand,	59 00
Globes on hand,	27 00
Horses, wagons, etc.,	225 00
Office furniture,	284 00
<hr/>	
Total assets, as per books of the Company,	\$242,792 85
LIABILITIES.	
Capital stock,	\$130,630 00
Notes payable,	74,000 00
Unpaid bills,	11,224 03
<hr/>	
Total liabilities, as per books of the Company,	\$215,854 03
Profit and loss balance,	26,938 82
<hr/>	
\$242,792 85	

MILFORD ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.	
Real estate,	}
Steam plant,	
Electric plant,	
Patent rights,	
Lines, meters, lamps and globes,	
Cash on hand,	939 42
Due for light and power,	1,086 01
Materials on hand,	839 00
Sundry accounts,	1,929 66
<hr/>	
Total assets, as per books of the Company,	\$46,142 23
Profit and loss balance,	1,793 82
<hr/>	
\$47,936 05	

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	5,000 00
Other amounts due from the Company,	2,936 05
<hr/>	
Total liabilities, as per books of the Company,	\$47,936 05

MILLBURY ELECTRIC COMPANY.

ASSETS.

Real estate,	\$559 87
Steam plant,	1,344 56
Electric plant,	7,779 78
Lines, meters, lamps and globes,	3,471 97
Cash on hand,	8 41
Due for light and power,	516 83
Other accounts due the Company,	190 00
Carbons on hand,	5 00
Oil and waste on hand,	5 00
Other materials on hand,	5 00
Fixtures on hand,	10 00
<hr/>	
Total assets, as per books of the Company,	\$13,896 42

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	2,622 00
Unpaid bills,	685 36
Other amounts due from the Company,	25 00
<hr/>	
Total liabilities, as per books of the Company,	\$13,332 36
Profit and loss balance,	564 06
<hr/>	
	\$13,896 42

NATICK ELECTRIC COMPANY.

ASSETS.

Steam plant,	\$5,700 00
Electric plant,	9,500 00
Lines, meters, lamps and globes,	19,026 23
Due for light and power,	617 00
Fuel on hand,	165 00
Carbons on hand,	17 50

Oil and waste on hand,	\$43 00
Incandescent lamps on hand,	250 00
Globes on hand,	25 00
Other materials on hand,	150 00

Total assets, as per books of the Company, . . . \$35,493 73

LIABILITIES.

Capital stock,	\$14,800 00
Notes payable,	14,649 43
Unpaid bills,	4,776 80

Total liabilities, as per books of the Company, . . \$34,226 23

Profit and loss balance, 1,267 50

\$35,493 73

NEWBURYPORT ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$8,469 92
Steam plant,	13,798 81
Electric plant,	19,240 37
Lines, meters, lamps and globes,	16,036 14
Due for light and power,	1,517 06
Other accounts due the Company,	174 48
Fuel on hand,	39 00
Carbons on hand,	9 90
Oil and waste on hand,	31 60
Incandescent lamps on hand,	604 35
Globes on hand,	72 00
Other materials on hand,	613 19
Motors on hand,	1,214 00
Horses, wagons, etc.,	190 00
Office furniture,	31 85
Sundry accounts,	1,085 96

Total assets, as per books of the Company, . . . \$63,128 63

Profit and loss balance, 786 82

\$63,915 45

LIABILITIES.

Capital stock,	\$28,300 00
Notes payable,	29,758 98
Unpaid bills,	5,616 64
Interest due but not paid,	90 00
Other amounts due from the Company,	149 83

Total liabilities, as per books of the Company, . . . \$63,915 45

NEWTON ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$6,280 00
Steam plant,	10,989 87
Electric plant,	20,836 66
Lines, meters, lamps and globes,	18,603 29
Cash on hand,	4,459 97
Due for light and power,	1,565 71
Other accounts due the Company,	65 00
Fuel on hand,	145 00
Carbons on hand,	8 00
Oil and waste on hand,	62 00
Incandescent lamps on hand,	182 00
Globes on hand,	13 30
Horses, wagons, etc.,	505 00

Total assets, as per books of the Company, . . . \$63,715 80

LIABILITIES.

Capital stock,	\$48,500 00
Notes payable,	7,123 33
Unpaid bills,	2,638 25

Total liabilities, as per books of the Company, . . . \$58,261 58

Profit and loss balance, 5,454 22

\$63,715 80

NORTH ADAMS ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Steam plant,	\$1,456 87
Electric plant,	5,460 00
Line, meters, lamps and globes,	6,314 58
Cash on hand,	342 00
Due for light and power,	480 63
Carbons on hand,	24 00
Oil and waste on hand,	18 75
Incandescent lamps on hand,	40 40
Globes on hand,	12 00
Other materials on hand,	50 17

Total assets, as per books of the Company, . . . \$14,199 40

LIABILITIES.

Capital stock,	\$7,500 00
Notes payable,	1,500 00
Unpaid bills,	1,530 42
<hr/>	
Total liabilities, as per books of the Company,	\$10,530 42
Profit and loss balance,	3,668 98
<hr/>	
	\$14,199 40

NORTHAMPTON ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$9,500 00
Steam plant, }	22,979 00
Electric plant, }	
Lines, meters, lamps and globes,	25,282 39
Cash on hand,	371 90
Due for light and power,	1,154 90
Fuel on hand,	100 00
Carbons on hand,	50 00
Office furniture,	89 80
Tools,	80 38
<hr/>	
Total assets, as per books of the Company,	\$59,708 37

LIABILITIES.

Capital stock,	\$51,300 00
Notes payable,	4,600 00
Unpaid bills,	1,550 51
<hr/>	
Total liabilities, as per books of the Company,	\$57,450 51
Profit and loss balance,	2,257 86
<hr/>	
	\$59,708 37

NORTH ATTLEBOROUGH STEAM AND ELECTRIC COMPANY.

ASSETS.

Real estate,	\$3,195 75
Steam plant, }	62,262 42
Electric plant, }	
Patent rights, }	
Lines, meters, lamps and globes, }	
Cash on hand,	565 62

Due for light and power,	\$831 63
Other accounts due the Company,	267 43
Fuel on hand,	163 76
Carbons on hand,	625 00
Oil and waste on hand,	107 00
Incandescent lamps on hand,	56 35
Globes on hand,	78 10
Other materials on hand,	100 00
Motors on hand,	258 40
Office furniture,	100 00

Total assets, as per books of the Company, \$68,611 45

LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	15,900 00
Notes payable,	1,500 00
Unpaid bills,	7,212 54
Other amounts due from the Company,	9,237 48

Total liabilities, as per books of the Company, . . . \$63,850 02

Profit and loss balance, 4,761 43

\$68,611 45

PITTSFIELD ELECTRIC LIGHT COMPANY.

ASSETS.

Electric plant,	\$14,701 72
Cash on hand,	180 77
Due for light and power,	1,325 48
Other accounts due the Company,	7 17

Total assets, as per books of the Company, \$16,215 14

LIABILITIES.

Capital stock,	\$5,000 00
Notes payable,	2,100 00
Unpaid bills,	1,163 95
Interest due but not paid,	126 00

Total liabilities, as per books of the Company, . . . \$8,389 95

Profit and loss balance, 7,825 19

\$16,215 14

PITTSFIELD ILLUMINATING COMPANY.

ASSETS.

Steam plant,	\$10,000 00
Electric plant,	15,000 00
Lines, meters, lamps and globes,	10,515 32
Cash on hand,	179 38
Accounts due the Company,	1,865 75
Oil and waste on hand,	45 00
Incandescent lamps on hand,	100 00
Other materials on hand,	726 66
<hr/>	
Total assets, as per books of the Company,	\$38,432 11
Profit and loss balance,	804 89
<hr/>	
	\$39,237 00

LIABILITIES.

Capital stock,	\$25,000 00
Notes payable,	10,000 00
Unpaid bills,	4,237 00
<hr/>	
Total liabilities, as per books of the Company,	\$39,237 00

QUINCY ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$4,585 00
Lines, meters, lamps and globes,	2,246 39
Cash on hand,	2,030 38
<hr/>	
Total assets, as per books of the Company,	\$8,861 77
Profit and loss balance,	378 23
<hr/>	
	\$9,240 00

LIABILITIES.

Capital stock,	\$9,240 00
<hr/>	
Total liabilities, as per books of the Company,	\$9,240 00

SALEM ELECTRIC LIGHTING COMPANY.

ASSETS.

Construction,	\$73,702 02
Franchise,	10,000 00

Cash on hand,	\$3,407 95
Due for light and power,	3,629 06
Other accounts due the Company,	42 50
Investments,	7,500 00

Total assets, as per books of the Company, . . . \$98,281 53

LIABILITIES.

Capital stock,	\$70,000 00
Reserved fund,	7,601 35

Total liabilities, as per books of the Company, . . . \$77,601 35

Profit and loss balance, 20,680 18

\$98,281 53

SOMERVILLE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$16,465 70
Steam plant,	14,081 09
Electric plant,	11,887 25
Construction and miscellaneous expense accounts,	45,850 73
Cash on hand,	771 26
Due for light and power,	1,607 50
Other accounts due the Company,	1,063 50
Fuel on hand,	176 00
Carbons on hand,	90 00
Oil and waste on hand,	40 00
Incandescent lamps on hand,	213 40
Globes on hand,	16 00
Other materials on hand,	1,762 70
Fixtures on hand,	130 00
Horses, wagons, etc.,	191 00
Office furniture,	140 00

Total assets, as per books of the Company, . . . \$94,486 13

LIABILITIES.

Capital stock,	\$80,000 00
Bonds issued,	11,813 50

Total liabilities, as per books of the Company, . . . \$91,813 50

Profit and loss balance, 2,672 83

\$94,486 33

SOUTHBRIDGE* ELECTRIC COMPANY.

ASSETS.

Real estate,	\$2,602 93
Steam plant,	4,423 71
Electric plant,	6,956 64
Lines, meters, lamps and globes,	11,617 56
Cash on hand,	1,116 83
Fuel on hand,	} 766 35
Carbons on hand,	
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	89 32
Other materials on hand,	108 36
Horses, wagons, etc.,	248 61

Total assets, as per books of the Company, . . . \$27,930 31

LIABILITIES.

Capital stock,	\$15,000 00
Unpaid bills,	11,830 37

Total liabilities, as per books of the Company, . . . \$26,830 37

Profit and loss balance, 1,099 94

\$27,930 31

TAUNTON ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$3,000 00
Steam plant,	5,500 00
Electric plant,	4,500 00
Lines, meters, lamps and globes,	4,000 00
Cash on hand,	670 64
Fuel on hand,	10 00
Carbons on hand,	25 00
Oil and waste on hand,	10 00
Incandescent lamps on hand,	25 00
Globes on hand,	10 00
Other materials on hand,	15 00

Total assets, as per books of the Company, . . . \$17,765 64

Profit and loss balance, 2,234 36

\$20,000 00

LIABILITIES.

Capital stock,	\$20,000 00
Total liabilities, as per books of the Company,	\$20,000 00

UNITED ELECTRIC LIGHT COMPANY, SPRINGFIELD.

ASSETS.

Real estate,	\$20,000 00
Steam plant,	12,508 34
Electric plant,	80,723 76
Lines, meters, lamps and globes,	44,886 93
Cash on hand,	426 60
Due for light and power,	5,494 17
Carbons on hand,	300 00
Oil and waste on hand,	50 00
Incandescent lamps on hand,	500 00
Globes on hand,	50 00
Other materials on hand,	34 66
Motors on hand,	8,506 12
Station property,	5,066 58
Office furniture,	457 70
Investments,	2,602 69

Total assets, as per books of the Company,	\$181,607 55
Profit and loss balance,	1,961 93
	\$183,569 48

LIABILITIES.

Capital stock,	\$150,000 00
Notes payable,	21,528 19
Unpaid bills,	12,027 79
Unpaid dividends,	13 50

Total liabilities, as per books of the Company,	\$183,569 48
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WACHUSETT ELECTRIC LIGHT COMPANY, FITCHBURG.

ASSETS.

Steam plant, }		\$65,000 00
Electric plant, }		
Lines, meters, lamps and globes,	61,291 83	
Cash on hand,	306 72	

Due for light and power,	\$951 91
Fuel on hand,	21 00
Carbons on hand,	66 00
Oil and waste on hand,	15 12
Incandescent lamps on hand,	327 75
Globes on hand,	22 50
Fixtures on hand,	102 48

Total assets, as per books of the Company, . . . \$128,105 31

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	25,370 29
Unpaid bills,	1,145 59

Total liabilities, as per books of the Company, . . \$126,515 88

Profit and loss balance, 1,589 43

\$128,105 31

WEBSTER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$777 37
Steam plant,	3,869 42
Electric plant,	3,177 60
Lines, meters, lamps and globes,	6,520 38
Cash on hand,	47 27
Due for light and power,	250 96
Fuel on hand,	100 00
Carbons on hand,	20 00
Oil and waste on hand,	25 00
Materials on hand,	1,577 52

Total assets, as per books of the Company, . . . \$16,365 52

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	4,102 13
Unpaid bills,	2,249 56

Total liabilities, as per books of the Company, . . \$16,351 69

Profit and loss balance, 13 83

\$16,365 52

WOBURN ELECTRIC LIGHT COMPANY.

ASSETS.

Construction account,	\$33,000 00
Carbons on hand,	60 00
Oil and waste on hand,	20 00
Incandescent lamps on hand,	85 00
Globes on hand,	4 00

Total assets, as per books of the Company, . . . \$33,169 00

LIABILITIES.

Capital stock,	\$21,000 00
Notes payable,	12,000 00

Total liabilities, as per books of the Company, . . . \$33,000 00
 Profit and loss balance, 169 00

\$33,169 00

WORCESTER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$5,000 00
Steam plant,	24,075 00
Electric plant,	33,750 00
Lines, meters, lamps and globes,	46,383 55
Cash on hand,	1,906 64
Due for light and power,	5,906 93
Other accounts due the Company,	17 70
Fuel on hand,	684 46
Carbons on hand,	550 00
Incandescent lamps on hand,	225 00
Globes on hand,	210 00
Other materials on hand,	2,750 00
Fixtures on hand,	787 00
Office furniture,	150 73

Total assets, as per books of the Company, . . . \$122,397 01

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	9,000 00
Unpaid bills,	1,836 49

Total liabilities, as per books of the Company, . . . \$110,836 49
 Profit and loss balance, 11,560 52

\$122,397 01

APPENDIX C.

COMMONWEALTH OF MASSACHUSETTS.

OFFICE OF THE BOARD OF GAS COMMISSIONERS,
NO. 13 BEACON STREET,
BOSTON, June 28, 1888.

To the Presidents and Directors of the several Electric Light Companies in the Commonwealth.

These blanks for the annual returns are sent in duplicate, one to be filled out, sworn to, and returned to this Board on or before *Sept. 12, 1888*. On the other blank, a copy of the return should be made and retained by the Company for future reference. The returns are for the year ending June 30, 1888.

The returns should be made in accordance with the general instructions regarding books and accounts, and especial attention should be given to expenses, income and balance sheet, which must be an exact transcript from the books of the Company at the close of business, June 30, 1888.

Read carefully the general instructions regarding books and accounts.

When, from any cause, it is not possible to answer any particular question, the space designed for the answer should be filled with a (—), to indicate that the question has not been overlooked:

Any inquiries, or other communications in relation to the returns, should be addressed to A. B. COFFIN, Chairman of the Board, at this office.

Per order of the Board of Gas Commissioners,

WALTER S. ALLEN, *Clerk.*

RETURN OF THE COMPANY TO THE BOARD
OF GAS COMMISSIONERS OF MASSACHUSETTS,

FOR THE YEAR ENDING JUNE 30, 1888.

Please give full corporate title of Company,
Under the laws of what State chartered?
How organized (under general law, or special act)?
Date of organization (if under general law),
Date of incorporation (if special act),
Date or dates when capital was paid in,
Location of principal business office,
Names of the cities or towns supplied with electricity by the Company,
with number of customers in each place,

LIST OF SALARIED OFFICERS.

NAME.	Official Position.	Annual Salary.

SCHEDULE A.

CAPITAL, DEBTS, COST OF PLANT, JUNE 30, 1888.

CAPITAL.

1. Capital authorized by charter, \$
2. Capital authorized by votes of Company,
3. Capital paid in:

shares, par value, \$, \$

Whole number of stockholders,
Number of stockholders resident in Massachusetts,
Amount of stock held in Massachusetts, shares.
Amount of stock held by parent company, shares.

DEBTS.

4. Bonds or notes issued, viz.:

Date.	When Due.	How Secured.	Rate of Interest.	Amount.

5. Total amount of bonds and notes,	\$
6. Other permanent debts, if any, ¹	
7. Capital paid in, as per item 3,	
<hr/>	
8. Total liability for capital and loans,	\$

COST OF PLANT.

(As the accounts stand on the books of the Company at close of business, June 30, 1888.)

9. Cost of real estate,	\$
10. Cost of steam plant,	
11. Cost of electric plant,	
12. Cost of lines,	
13. Cost of lamps and globes (original installations),	
14. Cost of meters,	
15. Cost and description of other permanent works, if any,	
<hr/>	
16. Total cost of plant as per books of the Company, June 30, 1888,	\$
<hr/>	
17. Amount (if any) charged to construction during the year,	\$

COMPARISON OF VALUES.

18. Value of real estate, as assessed in the city or town where located,	\$
19. Value of steam and electric plant, as assessed in the city or town where located,	
20. Value of any other property, as assessed in the city or town where located,	
<hr/>	
21. Total value of plant, as assessed by local assessors,	\$
Total cost, as per item 16,	
<hr/>	
22. Excess of ² value, over ² value,	\$
<hr/>	
Total cost of plant, as per item 16,	\$
Amount of capital and loans, as per item 8,	
<hr/>	
23. Cost of plant ³ than capital and loans,	\$

¹ This should not include unpaid interest, dividends or amounts due, or notes given for current supplies.

² This blank to be filled with the word "assessed" or "cost," as required.

³ This blank to be filled with the word "more" or "less," as required.

SCHEDULE B.
STATEMENT OF INCOME AND EXPENSES FOR THE YEAR ENDING JUNE 30, 1888.

EXPENSES.		\$	\$	INCOME.		\$	\$
FOR MANUFACTURE:				1. From commercial arc lights,			
1. Coal or other fuel, including all expenses of depositing at works,				2. From commercial incandescent lights,			
2. Oil and waste,				3. From public arc lights,			
3. Water,				4. From public incandescent lights,			
4. Wages at station,				5. From electric power,			
5. Repairs of steam plant,				6. Total from light and power,			
6. Repairs of electric plant,							
7. Apparatus and machinery,				FROM OTHER SOURCES, VIZ.:			
Less old material sold,				7. Rent of motors,			
FOR DISTRIBUTION:				8. Rent of fixtures,			
8. Wages for care of lights and meters, clerical labor in this department, and salary or commission of collectors,				9. Rent of meters,			
9. Repairs and renewals of lines, meters, lamps and motors,				10. ²			
10. Carbons,				11.			
11. Incandescent lamps,				12.			
12. Globes,							
Less old material sold,							
FOR OFFICE EXPENSES AND MANAGEMENT:							
13. Directors' allowances,							
14. Salaries of officers,							
15. General salaries,							
16. Rent of offices, if separate from plant,							
17. General office expenses,							
FOR MISCELLANEOUS EXPENSES:							
18. Taxes. Town or city,	\$						
Corporation,							
Gas Commission,							
19. Rent of real estate used for plant,							
20. Fire insurance,							
21. Law expenses,							
22. Claims,							
23. Bad debts,							
24. Incidental expenses, ¹ viz.: a b c							
25. Total expenses,				13. Total receipts,			
26. Balance to profit and loss,							

¹ To include only such items of expenses attending the manufacture and sale of electricity as are not already given.

² Such items of income arising only from the electric light and power business as are not included above.

SCHEDULE D.
BALANCE SHEET, JUNE 30, 1893.

ASSETS.		LIABILITIES.	
Real estate,		Capital stock,	
Steam plant,		Bonds issued,	
Electric plant,		Notes payable, ³	
Patent rights,		Unpaid bills,	
Lines, meters, lamps and globes,		Unpaid dividends,	
Cash on hand,		Interest due but not paid,	
Due for light and power, ¹		Reserved fund,	
Other accounts due the Company,		Amounts due from the Company not included above,	
Fuel on hand,			
Carbons on hand,			
Oil and waste on hand,			
Incandescent lamps on hand,			
Globes on hand,			
Other materials on hand,			
Motors on hand,			
Fixtures on hand,			
Horses, wagons, etc.,			
Office furniture,			
Notes receivable,			
Investments ² (giving particulars thereof),			
Total assets, as per books of the Company,	\$	Total liabilities, as per books of the Company,	\$
Profit and loss balance (if deficit),	\$	Profit and loss balance (if surplus),	\$

¹ This item should include the amount of all bills for the month or quarter ending in June.

² Including any real estate so held. ³ State whether secured by mortgage or not.

GENERAL INFORMATION.

Location of plant,

Area of land, and size and material of buildings occupied by the Company,

Are the same owned, or leased, by the Company?

Description of motive power :

BOILERS.

No.	MAKER.	Kind of Setting.	Diameter of Shell.	No. of Tubes.	Diameter of Tubes.	Usual Steam Pressure.	Rated Horse-Power.

ENGINES.

No.	MAKER.	Diameter of Cylinder.	Stroke of Piston.	No. of Revolutions per Minute.	Rated Horse Power.

WATER WHEELS.

No.	MAKER.	Diameter.	Fall.	Estimated Horse-Power.

Are the dynamos belted directly to the engines?

Description of Dynamos :

	No.	MAKER.	Capacity of each. ¹	Ampere Current.	Nominal Candle Power.
Arc :					
Incandescent : Direct Current.					
Municipal System : Direct Current.					
Incandescent : Alternating Current.					

¹ Number of lamps.

Description of the Arc Lines :

CIRCUITS.	Length feet out and return.	SIZE OF WIRE.	ARC LAMPS.				INCANDESCENT LAMPS.				MOTORS.		Volts.
			PUBLIC.		COM- MERCIAL.		PUBLIC.		COM- MERCIAL.				
		No.	Gauge.	No.	C. P.	No.	C. P.	No.	C. P.	No.	C. P.	No.		H. P.
No. 1, No. 2, No. 3, No. 4, No. 5,													

Description of the Incandescent Lines :

DIRECT CURRENT.

FEEDERS.	No. of Wires.	Length of Wire, feet.	SIZE OF WIRE.		LAMPS SUPPLIED.		Volts.	MOTORS SUPPLIED.		Volts.
			No.	Gauge.	No.	C. P.		No.	H. P.	
No. 1, No. 2, No. 3, No. 4, No. 5,										

Description of the Incandescent Lines :

DIRECT CURRENT.

MAINS.	Number of Wires.	Length of Wire, Feet.	SIZE OF WIRE.		LAMPS ATTACHED.		Volts.	MOTORS ATTACHED.		Volts.
			No.	Gauge.	No.	C. P.		No.	H. P.	
No. 1, No. 2, No. 3, No. 4, No. 5,										

MUNICIPAL SYSTEM.

CIRCUITS.	Length feet out and return.	SIZE OF WIRE.		LAMPS.		Volts.
		No.	Gauge.	No.	C. P.	
No. 1, No. 2, No. 3, No. 4, No. 5, No. 6, No. 7, No. 8, No. 9, No. 10,						

ALTERNATING CURRENT.

CIRCUITS.	Length of Wire out and return, feet.	SIZE OF WIRE.		LAMPS.		Volts.	MOTORS.		Volts.
		No.	Gauge.	No.	C. P.		No.	H P	
No. 1, No. 2, No. 3, No. 4, No. 5,									

CONVERTERS.

No.	No. of Lights each.	Candle-Power.	Location of Converters.

Largest and least number of lights supplied on any day in each month :

MONTHS.	GREATEST NUMBER.				SMALLEST NUMBER.			
	PUBLIC.		COMMERCIAL.		PUBLIC.		COMMERCIAL.	
	Arc.	Est. Incandescent.	Arc.	Est. Incandescent.	Arc.	Est. Incandescent.	Arc.	Incandescent.
July,								
August,								
September,								
October,								
November,								
December,								
January,								
February,								
March,								
April,								
May,								
June,								

What kind of wire does your Company use?

Total length of potential wire, feet, No. gauge.

Number of Company's poles set in streets or public ways,

Materials used for poles,

What other means of supporting wires are used, and to what extent?

Length, in feet, of streets or public ways occupied by overhead wires,

Length, in feet, of underground conduit,

Length, in feet, of wire in the same,

Number of single arc lamps used,

Number of double arc lamps used,

Number of plain carbons used during the year,

Number of copper-coated carbons used during the year, .

Number of customers for commercial arc lights only,

Total number of customers for commercial incandescent lights only,

Number of customers for commercial incandescent lights off arc circuits,

- Number of customers for both arc and incandescent commercial lights,
 Number and size of lamps used at station and office,
 Number of hours public lights are burned per night,
 Number of nights burned per month,
 Average life of lamps removed during the year, in hours, on direct
 incandescent current,
 Average life of lamps removed during the year, in hours, of incandescent
 lamps off arc circuits,
 Average life of lamps removed during the year, in hours, of lamps on
 alternating circuits,
 Price charged per night, per light, for public arc lights,
 Price charged per night, per light, for public incandescent lights,
 Schedule of prices for commercial arc lights,
 Schedule of prices for commercial incandescent lights,
 Schedule of prices for electric power,
 Have any changes been made during the year in prices for lights?
 What kinds of electric motors are used, and for what kinds of work are
 they employed?
 Does the Company wire buildings? If so, on what terms?
 On what terms does the Company furnish incandescent lamps and re-
 newals of the same?

Statement of coal and other fuel for year ending June 30, 1888:—

	On hand June 30, 1887.	Received during the Year.	Used during the Year. ¹	On hand June 30, 1888.
	Tons.	Tons.	Tons.	Tons.
Coal,				
Other fuel,				

Average cost of same delivered at works,

Average number and wages of men employed, viz.:—

Number of Men.	How Employed.	Average Wages per Month.

What is the total amount expended for construction during the year?

NAME AND RESIDENCE OF OFFICERS.

President,
Vice-President,
Manager,
Superintendent,
Treasurer,
Clerk of the Corporation,

¹ Should include shrinkage.

NAME AND RESIDENCE OF DIRECTORS.

*President.**Treasurer.*

Directors.

COMMONWEALTH OF MASSACHUSETTS.

ss.

1888.

Then personally appeared
and severally made oath to the truth of the foregoing statement by them
subscribed, according to their best knowledge and belief.

Justice of the Peace.

APPENDIX D.

[Chap. 350, Acts of 1888.]

AN ACT

IN ADDITION TO AN ACT TO ESTABLISH A BOARD OF GAS COMMISSIONERS.

Be it enacted, etc., as follows :

SECTION 1. Any gas company in this Commonwealth, whether furnishing gas under the provisions of general laws or of any special charter or of any contract with any city or town, may apply to the board of gas commissioners to fix and determine the price of the gas to be thereafter sold and delivered by said company, or to revise any former order or action of said board in regard to the quality or price thereof; said board after such notice as it shall deem expedient shall give a public hearing on such application to the petitioner and to the city or town and such other persons interested as may desire to be heard, and thereafter may pass such orders and take such action in regard to the subject matter as it may deem just and reasonable, and the orders and decrees of such board in relation to the price and quality of the gas thereafter to be furnished by said company shall be thereafter binding upon all parties until further order of said board. Whenever, pursuant to section nine of chapter three hundred and fourteen of the acts of the year eighteen hundred and eighty-five, the said board has ordered a reduction in the price of gas or improvement in quality thereof, the maximum price fixed by such order shall not be increased by the company named therein except in the manner herein provided.

SECT. 2. All companies and individuals engaged in the business of manufacturing and selling gas or electricity for light or fuel shall make a written report within twenty-four hours to the board of gas commissioners of every accident caused by the gas or electricity manufactured or supplied by them, whereby an employee or any other person shall suffer bodily injury, or loss of life, or be rendered insensible, stating the time, place and circumstances of the accident, and such other facts in relation thereto as the board may require; and the board shall present in its annual report an abstract of all such cases. The board shall personally investigate all cases which it may deem to require investigation.

SECT. 3. This act shall take effect on the thirtieth day of June in the year eighteen hundred and eighty-eight. *[Approved May 17, 1888.]*

[Chap. 428, Acts of 1888.]

AN ACT

AUTHORIZING THE GAS COMMISSIONERS TO LICENSE CERTAIN GAS COMPANIES TO MAKE AND SELL WATER GAS FOR ILLUMINATING PURPOSES.

Be it enacted, etc., as follows:

SECTION 1. The board of gas commissioners is hereby authorized to license any gas company now authorized to make gas for illuminating purposes to make and sell water gas for illuminating purposes containing any percentage of carbonic oxide that said board may determine: *provided*, that such board shall be of opinion and certify in any license granted by them that in their opinion the gas so authorized can be used with safety for such purposes, and after receiving such license said company shall be exempt from any penalty or prohibition provided in section fourteen of chapter sixty-one of the Public Statutes relating to carbonic oxide, provided the percentage of carbonic oxide shall not exceed the limit allowed by said board.

SECT. 2. Any company who shall under the provisions of the first section of this act be licensed to make and sell water gas for illuminating purposes containing an excess of ten per cent. of carbonic oxide, shall furnish to every actual consumer a copy of the gas commissioners' license which shall contain a statement of the percentage of carbonic oxide such gas contains as near as the same can be ascertained. And no company so licensed shall charge more for water gas in any locality than is charged in that locality by any company furnishing gas therein when the manufacture and sale of such water gas is so licensed.

SECT. 3. This act shall take effect upon its passage. [*Approved May 29, 1888.*]

[Chap. 252, Acts of 1888.]

AN ACT

CONSOLIDATING THE LYNN GAS LIGHT COMPANY AND THE LYNN ELECTRIC LIGHTING COMPANY.

Be it enacted, etc., as follows:

SECTION 1. The Lynn Gas Light Company and the Lynn Electric Lighting Company may, in accordance with the respective votes of said two corporations already adopted by the stockholders thereof representing more than two-thirds of the stock of each corporation respectively, at meetings of each corporation called for the purpose, so far as said votes now appear of record, consolidate and form one corporation, to be called the Lynn Gas

and Electric Company: *provided, however*, that no such consolidation shall be valid without the consent in writing of the board of gas commissioners.

SECT. 2. Said consolidated corporation is hereby authorized to engage in the business of generating and furnishing electricity in the territory in which said Lynn Electric Lighting Company is now authorized by its charter to make and supply the same; and to engage in the business of generating and furnishing gas in the territory in which said Lynn Gas Light Company is now authorized by its charter to make and supply gas, and except as herein limited shall have all the rights and enjoy all the powers, privileges, franchises, licenses, property and estates which at the time of such consolidation may be held and enjoyed by either of said existing corporations, and be subject to all the duties, restrictions and liabilities to which either of said existing corporations is now subject, and to all general laws which now are or hereafter may be in force relating to like corporations and to the provisions of section three of chapter one hundred and five of the Public Statutes.

SECT. 3. The capital stock of the consolidated or new corporation, formed as aforesaid, shall not upon such consolidation exceed the sum of four hundred thousand dollars and shall be issued to stockholders of said existing corporations upon such terms and in such manner as may be provided by the respective presidents and directors of said two companies in pursuance of the authority given by the votes mentioned in section one. But the capital stock of said new corporation may subsequently be increased or diminished from time to time, in accordance with the provisions of chapter one hundred and six of the Public Statutes.

SECT. 4. Upon said consolidation the new corporation thereby formed shall be subject to all the debts and liabilities of each of the old corporations: *provided, however*, that said debts and liabilities shall be and remain a first lien upon all the property, assets and franchises contributed by said corporations respectively to the consolidated or new corporation, so that all the property, assets and franchises of the Lynn Electric Lighting Company shall be liable for and respond to the payment of all its debts and liabilities at the time of such consolidation before being liable for the payment of the debts and liabilities of the Lynn Gas Light Company, and vice versa.

SECT. 5. The first meeting of the new or consolidated corporation, hereby authorized, shall be called by the presidents of the two corporations of which it is formed. Seven days' notice of the time and place of said meeting shall be given by publication in some one newspaper published in the city of Lynn, Massachusetts, to the stockholders of said two existing corporations. At said meeting, including any necessary or reasonable adjournment thereof, an organization shall be effected by the adoption of by-laws, the choice by ballot of a clerk, a treasurer and not less than three directors; and the officers so chosen shall hold their offices until the first annual meeting held in pursuance of said by-laws, and until others are chosen and qualified in their stead; and persons holding stock in either of said two corporations at the time of said first meeting shall be entitled to vote upon the number of shares of stock held by them respectively. Upon such organization of said new company the proper officers thereof shall cause such stock transfers, surrenders, exchanges, and cancellations to be

made, and such new certificates of stock to be issued, as may be required to carry into effect the terms of consolidation fixed and determined as aforesaid.

SECT. 6. This act shall take effect upon its passage. [*Approved April 20, 1888.*]

[Chap. 427, Acts of 1888.]

A N A C T

IN RELATION TO THE BAY STATE GAS COMPANY.

Be it enacted, etc., as follows:

SECTION 1. The Bay State Gas Company is hereby authorized to increase its capital stock to an amount not exceeding two million five hundred thousand dollars, subject to the provisions of the general laws and the approval of the board of gas commissioners. Such additional stock to be issued from time to time in such amounts as the said board may determine to be necessary or expedient to carry into effect the objects for which said company was organized.

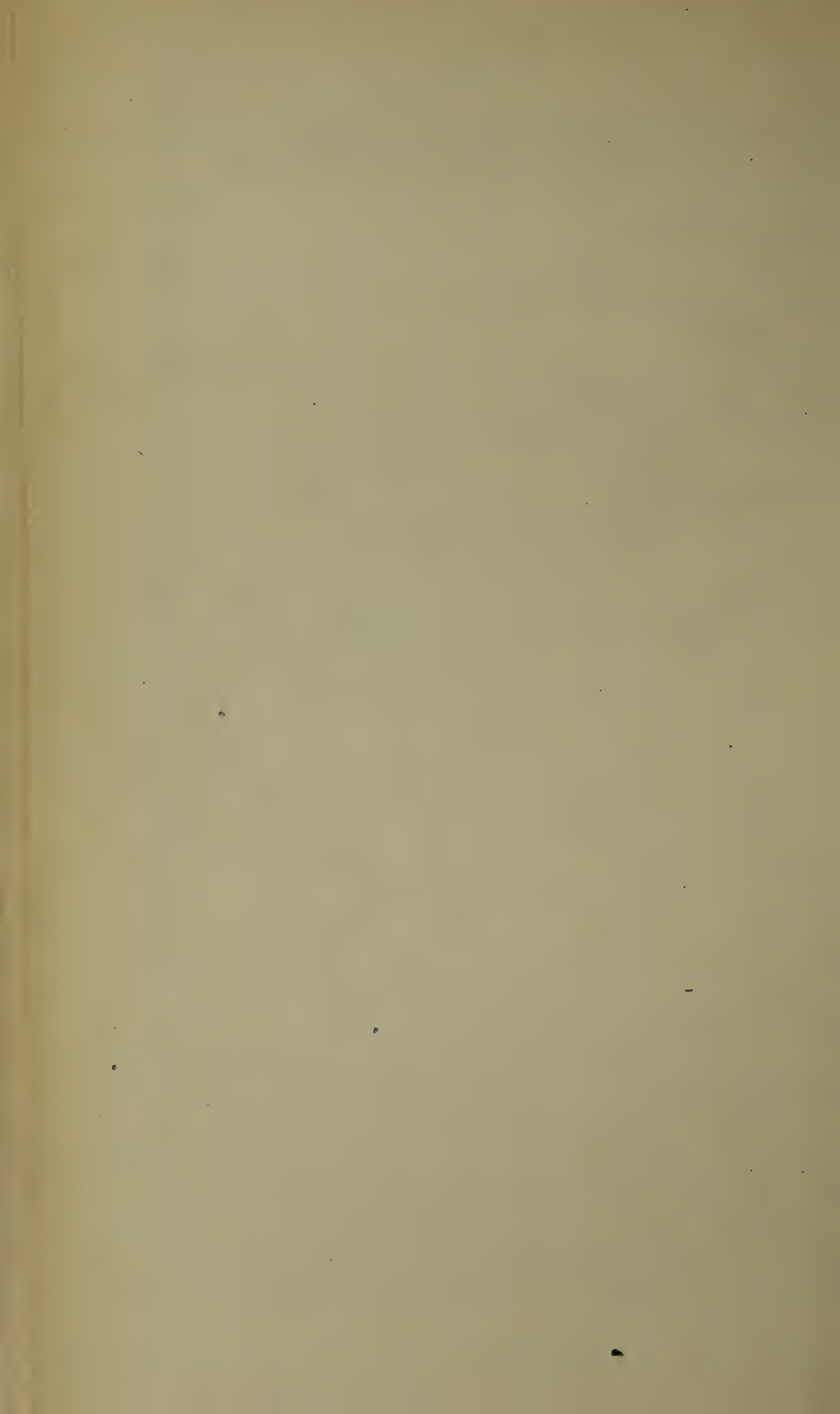
SECT. 2. This act shall take effect upon its passage. [*Approved May 29, 1888.*]

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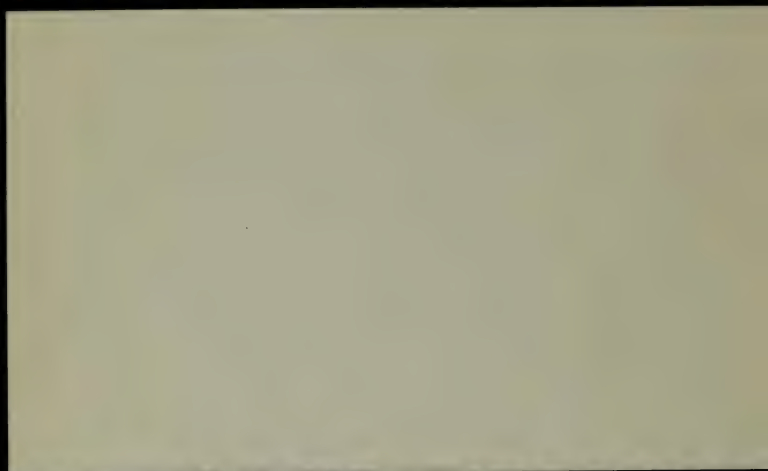


COMPLIMENTS OF

F. E. Barker

BOARD OF

Gas and Electric Light Commissioners.



FIFTH ANNUAL REPORT
OF
THE BOARD
OF
GAS AND ELECTRIC LIGHT
COMMISSIONERS

OF THE
Commonwealth of Massachusetts.

JANUARY, 1890.

BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.

1890.



Commonwealth of Massachusetts.

SECRETARY'S DEPARTMENT, BOSTON, Feb. 4, 1890.

Hon. WILLIAM E. BARRETT,
Speaker of the House of Representatives.

SIR:—I have the honor to transmit herewith the Fifth Annual Report of the Board of Gas and Electric Light Commissioners.

Respectfully,

HENRY B. PEIRCE,
Secretary of the Commonwealth.

Commonwealth of Massachusetts.

The Board of Gas and Electric Light Commissioners respectfully submits its Fifth Annual Report.

The name of the Board was changed by chapter 373 of the Acts of last year, that it might designate both branches of the business placed under its supervision by previous statutes. In the State there are 75 gas companies, 26 of which have the right to supply both gas and electricity; and 100 electric light and power companies, many of them recently incorporated. Probably three-fourths of the electric light and power companies were actually engaged in business at the close of the year. So far, the observation of the Board, and it is hoped the administration of its duties, have fully justified the policy of the Legislature, as shown in the various acts for the regulation and control of the gas and electric companies in the Commonwealth. The number of companies which can conveniently do the business must be necessarily limited, owing to the nature of the work, and to the fact that much of it must be done in the public streets. With the best regulation, and only companies and plants sufficient to meet the wants of the consumers, there must still be considerable interference with the streets and highways. The Board has endeavored always to keep in mind the welfare of the different communities in which it has been called to act. In the smaller cities and towns, following the policy indicated by the Legislature, it has great confidence in the wisdom of allowing one company to do all the lighting. When the attention of consumers has been called to the provisions in the laws adopted for their protection, especially to the statutes which allow the Board to fix the price of light, or compel its supply when reasonably demanded by a citizen, or direct an improvement in the quality of the light furnished, a very general approval of the enactments and of the

action under them has been manifested. Simply informing a company of any complaint against it, has, as a rule, produced the desired result and brought about the remedy. The statutes by their very existence keep the companies on the alert, and the people derive a benefit from them much beyond what is disclosed by formal proceedings before the Board. Indeed, companies frequently request that they may be speedily and informally notified of any complaint, and, with scarcely an exception, have shown a hearty alacrity in conforming with the suggestions of the Board.

In construing and applying the recent statutes according to their true meaning and intent, the commissioners have been called upon, in several cases of appeal, to deny new companies the privilege of going into business. Unless it was made clear that a new company could perform the work and supply a community better and more cheaply than could be done by the existing company or companies, they have felt obliged and believed it wise not to license another company. The energy and enterprise shown, especially in the electric lighting branch of the business, have been so great, and withal so commendable, that the Board has often with reluctance felt obliged to render an adverse decision, as the only one consistent with the true interpretation of the laws applicable in the case, and most beneficial to the permanent interests of the city or town. The various decisions will be found in the body of the report.

Since the Board was given supervision of electric light companies, its incidental expenses have necessarily increased. It is suggested that the law should allow a larger appropriation therefor.

GAS COMPANIES.

The Cottage City Gas Company, having gone into insolvency in December, 1888, its assignees sold the property of the company to parties who obtained a charter under the name of the Cottage City Gas and Electric Company. The business has been so interrupted that no report of any value could be made.

The Citizens Steam and Gas Light Company of Lynn gave up making gas the first part of 1889, and the works were destroyed in the late fire. No report for the last year has been received, and the address of its officers is unknown to the Board.

The New Bedford Gas Light Company, by chapter 295 of the Acts of 1889, was authorized to supply gas and electricity in the town of Fairhaven.

WATER GAS.

The Board since its last report has continued its investigations on the subject of water gas. It is understood that the parties in interest do not desire to offer further evidence in the cases pending at the close of the year. The Board believes that some modification of the present law is desirable, and that a report of the work of the commissioners in this branch of their duties ought to be made to the Legislature at the present time.

In the course of its inquiries the Board has endeavored to ascertain what commercial advantages, if any, might accrue to the companies from an extension of the present statutory limit of carbonic oxide, believing that in any such advantages the consumers would ultimately share, and that the companies ought to be permitted to avail themselves of them, if they could do so without prejudice to the public interest. For this purpose information has been obtained by personal inspection and correspondence from more than a hundred companies. The Board desires to gratefully recognize the uniform courtesy which has been freely extended it by the engineers in charge of water-gas works in other States, and to acknowledge its obligations for the information so freely furnished.

It is clear that the cost of gas, whether coal or water, is not an inflexible figure, the same for all times and places; an advance of fifty cents per ton in coal or of one cent per gallon in oil, making an increase of ten per cent. in the cost of coal and water gas respectively. In certain large works, where both kinds of gas have been made, the advantage in cost of production has been sometimes with one, sometimes with the other kind of gas. There are more exclusively water-gas works in the anthracite coal region in Pennsylvania, and within easy reach of it, than in any other portion of the country of the same area; because there the price of anthracite coal has been low, and that of gas coal relatively very high. The particular location of a gas works, and its arrangement, the quality of the materials and kind of apparatus used, and the kind of labor and superintendence available, may make even larger variations in the cost of either gas.

The expenses of distribution, management, taxes, etc., are not likely to vary greatly, whether coal or water gas is the product; so that the fact of value in estimating the cost of the two gases is the cost to manufacture or cost in the holder, as distinguished from cost at the meter.

The principal items of cost in the holder are for materials, coal and oil, labor and repairs. From the cost of materials in coal gas is to be deducted the very considerable receipts from the sale of coke, tar and ammoniacal liquor. Under the best conditions in this State these receipts have reached fifty per cent. of the cost of coal, and in some companies more favorably situated they have reached a much higher percentage.

A ton of good gas coal will yield approximately ten to eleven thousand feet of gas. In order to secure the candle-power usually supplied in this State there must be added about ten per cent. of cannel, or something more than five gallons of oil, equivalent to more than one-half gallon per thousand feet.

In the production of illuminating water gas there is commonly used more than fifty pounds of hard anthracite coal and from five to six and one-half gallons of oil for every thousand feet of gas, although in the very best works and under very favorable conditions these quantities may be slightly reduced. These two items nearly make up the cost of water gas in the holder.

In coal gas the cost of labor is a most important element. It often nearly equals one-half the gross cost of materials, and in many companies does not vary much from the net cost of coal. In water gas the cost of labor is small.

It has been very difficult for the Board to obtain definite and reliable information as to the cost of repairs in water-gas works. It is not a very considerable item in coal gas, and is probably about one-half as much in water gas.

The following figures show the range of cost in certain companies, each item being calculated independently of the other, and, it is believed, fairly indicate the difference of cost in the holder of the two gases:—

MATERIALS.

Coal Gas.

Gas coal,	40 to 43 cents.
Oil or cannel,	3 to 7 cents.
Residuals,	13 to 23 cents.
Net, for materials,	20 to 30 cents.
Labor,	14 to 20 cents.
Repairs,	5 to 8 cents.
Total,	50 to 57 cents.

Water Gas

Coal,	11 to 15 cents.
Crude oil,	13 to 18 cents.
Naphtha,	24 to 33 cents.
Materials,	{ 26 to 33 cents.* 38 to 45 cents.†
Labor,	
Repairs,	5 to 11 cents.
Repairs,	2 to 3 cents.
Total,	46 to 55 cents.

The figures relating to coal gas are taken from the returns of certain companies in this State, as made to the Board. The figures relating to water gas are estimates based upon information procured without the State, and intended to show what the same companies might do at current rates for materials, if they were making this instead of coal gas. It may be noted that the companies now making water gas in this State have not yet been able to equal the figures given. The relations shown above may be greatly changed at any time. The figures given for naphtha and crude oil are suggestive. A few years ago, when the number of water-gas works was small, the price of naphtha was about the same as that of crude oil to-day. As the demand for naphtha for gas-making purposes increased, the price advanced to a point which nearly neutralized the advantages of its use. Recently a crude oil, from the Ohio fields, difficult to refine, has come upon the market at a low price, and an apparatus specially adapted for it has again reduced the cost of water gas to the low point reached when naphtha was first introduced. There are now signs of an advance in its price.

There have been great improvements in water-gas apparatus, and there is much activity in this direction now. It is now claimed that cheap bituminous coal and slack can be made to do the work of expensive anthracite; and, if the expectations of the inventors of

* Crude oil.

† Naphtha.

this new process are realized, the cost of producing water gas may be greatly lessened.

In companies whose output is below a certain limit, the peculiar conditions under which they make gas cause the cost to vary greatly from the figures given above. In these the cost per thousand feet for both coal and labor rises rapidly where coal gas is made. There is little or nothing obtainable from residuals, as all or nearly all the coke is used to carbonize the coal, and the production of gas per man is much reduced, since of necessity the gas maker must be idle much of the time. In a properly constructed water-gas works of very small output, while the cost of coal may be easily doubled by the necessity for frequently cooling and reheating the apparatus, the cost of labor is not materially different from the same item in large works. In a single day one man may make and store water gas sufficient for several days' consumption, during which the works need no attention, and the gas maker can devote himself to the numerous other details of the business. Instances have been observed by the Board, in other States, where small works have been carried on in this manner with apparently good results. For reasons not easy to enumerate, the attempts by small companies in this State to pursue a similar course have not heretofore been entirely successful.

Although in the larger works, except in favored localities, the commercial advantages of manufacturing exclusively coal or water gas may not be considerable, with the methods and apparatus now most in use, the advantage to company and consumer in the combination of the two gases is now generally recognized by the larger companies, and nearly one-third of all the companies in the country manufacture some water gas. The development of electric light, combined with other causes, has greatly increased the public demand for light; a gas of fifteen or sixteen candles is no longer acceptable, and from eighteen to twenty candle gas is as low as companies in the larger towns and cities think it wise to distribute. Gas of this quality cannot be produced with ordinary coal alone, but requires the addition of cannel coal or of oil; which latter, from its low cost and the facilities for handling, has been most generally adopted. For this use of oil the ordinary appliances of a coal-gas works are but poorly adapted. When oil is used in them, it has shown a decided tendency to pass with the coal gas as a vapor,

much of which is subsequently deposited in the mains or fixtures in a liquid form, or, by causing a hard substance to form at the tip, obstructs the flow of gas, and causes the forked and irregular flame so common where such gas is used; and the gas often manifests an uncontrollable tendency to smoke. To a high candle-power secured in this way is often due the blackened spots in the ceilings of dwelling-houses where such gas is used.

A water-gas apparatus affords the means for avoiding these difficulties. In this the heats best adapted to breaking up the oily particles into a fixed gas may readily be attained, and gas of a very high candle-power be made. When coal gas is made at the same works, and the two are mixed in the proper proportions and best manner, the unfortunate results mentioned as due to oil should not occur. The gas is composed of the same constituents, but in different proportions, and reaches the burner with that combination of heating and illuminating elements calculated to produce a clear, white flame, free from smoke.

Numerous other reasons suggested by local conditions have induced companies to add to coal-gas works apparatus for making water gas. It enables a company to easily meet a sudden demand for an unusual amount of gas. It can be made ready for gas-making at an hour's notice, then allowed to cool when the demand is over, and this course repeated indefinitely without injury, while coal-gas benches once treated in this manner would probably need rebuilding. An unexpected dark day may thus be readily provided for, and the considerable changes in consumption where street lights are burned by moon schedule, but are unexpectedly called for on stormy nights. In some places the increased consumption has made necessary some increase in the capacity of the works, which has been secured with less expense for extension by the introduction of water-gas apparatus, with a consequent saving in capital account. A brief period of extraordinary consumption in midwinter is sometimes provided for in this way. In many works where both kinds of gas are made, coke produced at the works is substituted for anthracite coal, furnishing a profitable use for surplus coke, and preventing a reduction of its price.

These are some of the indirect advantages resulting from a manufacture of both kinds of gas in the same works. They are quite independent of whether one gas made alone costs a little more or less

than the other. To secure them requires the distribution of a gas containing somewhat more than ten per cent. of carbonic oxide.

The question of the comparative safety of water and coal gas is a very perplexing and difficult one to solve satisfactorily. One or more members of the Board have personally examined the premises where a large number of deaths have occurred from asphyxiation by inhaling illuminating gas in Brooklyn, New York City, Baltimore and other cities. A few of these deaths were caused by coal gas, others probably by a mixed gas; but the larger number were due to water gas. Some valuable suggestions have been obtained from these inquiries, although great difficulty was experienced in securing exact or definite information. It was impossible, for instance, in most cases to ascertain the length of time the gas was discharged into the room; and in many cases the size of the burner, and whether partially or wholly open, were only matters of conjecture. Most of the accidents investigated occurred at the cheaper boarding and lodging houses. It was found in one city — and the same facts also applied to the others in a less degree — that a very low price for gas, great activity on the part of competing companies in canvassing for customers, and the very favorable terms that were made for piping buildings and furnishing fixtures, had led to the introduction of gas into the very cheapest lodging and boarding houses that are frequented by the dissolute and ignorant classes. In several instances it was evident that the inhaling of gas alone would not have produced death, but caused it by aggravating diseases existing at the time of the accident. Some of the rooms contained less than 500 cubic feet of space, and the average space of all the rooms was about 1,100 cubic feet. The largest amount of gas was 75 cubic feet, as nearly as could be ascertained, in a room containing 748 cubic feet of space; but there was an open transom at the time of the accident, and the person lived twelve hours after being discovered. The smallest amount of gas was 18 cubic feet, in a room containing 806 cubic feet of space; and the person was dead when found. The average amount of gas in the rooms was about 38 cubic feet. But, as before intimated, the information in regard to the amount of gas in the rooms where deaths occurred is unsatisfactory. In three instances where a man and a woman occupied rooms together, the men died and the women recovered.

In addition to these investigations, the Board has obtained, from newspapers and other sources, information in regard to the deaths of 107 persons in this country from inhaling illuminating gas during the year 1889. This is probably not the whole number of deaths from this cause, but perhaps complete enough to give some facts of interest in considering the question of danger from illuminating gas. There is conclusive evidence that 30 of these persons committed suicide, and there were circumstances attending the deaths of several others that indicated more or less strongly the same cause. But, deducting from the whole number only those suicides about which there can be no doubt, there were 77 deaths caused by accidentally inhaling illuminating gas. These occurred in the following towns and cities, viz.: Yonkers, N. Y., 1; Baltimore, 7; Oakland, Cal., 3; Jersey City, 2; New Brunswick, N. J., 1; Amesbury, Mass., 1; Paterson, N. J., 6; Huntington, Penn., 1; and Bethlehem, Penn., 3. In these places only water gas is believed to be manufactured. In New York City there were 24 deaths; Philadelphia, 2; San Francisco, 7; Chicago, 5; Brooklyn, 3; Washington, D. C., 2; Minneapolis, 1; Charlestown, Mass., 1. In these towns and cities a mixed coal and water gas is made, or there are coal and water gas plants in operation. There was 1 death in Cincinnati; 2 in Milwaukee; 1 in Lincoln, Neb.; 1 in Belleville, Ill.; and 1 in Portland, Me. These have only coal-gas plants. The following are the number of deaths for each month, viz.: January, 9; February, 5; March, 6; April, 3; May, 5; June, 7; July, 1; August, 1; September, 5; October, 10; November, 11; December, 12.

Forty-six of the deaths occurred in hotels, generally of the cheaper class, lodging and boarding houses where the rooms were usually small and poorly ventilated. In 18 of the accidents the gas was blown out by ignorant persons, and in 46 instances it was found turned on without any satisfactory evidence as to the cause. In 8 instances death was caused by gas stoves, in 1 by a leaking pipe, and in 3 by defective keys where the gas is turned on at the burner. Twenty-five of the persons killed were females, and 52 were males. Of the males, 17 were business men, 4 farmers, 2 professional men, 6 laborers, 2 sailors, 2 mechanics, 1 janitor, 1 railroad man, 1 teamster, 1 bartender, 1 waiter, 1 student, and 7 unclassified. Ten of the females were servants. In 20 cases the persons were more or less intoxicated

at the time of their deaths. It will be seen that 26 of the deaths occurred in places where only water gas is manufactured, 6 in those having only coal gas plants, and 46 in towns and cities where is furnished a mixed water and coal gas, or where there are plants of each gas. The largest number of deaths was 24, in New York City. In New England, where fourteen cities and towns are furnished with water gas and six with a mixed water and coal gas, there were three deaths. One of these resulted from inhaling water gas, one from coal gas, and the third one was caused by a mixed water and coal gas.

Some of the inferences to be drawn from the above facts are that about thirty per cent. of the deaths from illuminating gas are suicides, that about twenty per cent. are persons more or less intoxicated at the time of the accidents, and a considerable number are persons unacquainted with the use of gas. A comparatively small number of cases are purely accidents, that could not have been avoided.

From the fullest consideration which the commissioners have been able to give to the act, chapter 428, Acts of 1888, they believe that the correct interpretation of the statute does not permit them to issue a revocable license or one subject to modification, to impose any terms or conditions in the exercise of it, or to qualify in any manner the certificate which the license must contain, "that in their opinion the gas can be used with safety" for illuminating purposes. The degree of danger in the use of coal gas, water gas, or a mixture of the two, depends largely on the amount of carbonic oxide it contains. It is probably true that the Legislature of 1880 fixed the limit of carbonic oxide at ten per cent., because that limit was not exceeded in the manufacture of coal gas, and not because it was safe. Many reliable gas engineers now believe, and have expressed the opinion to the members of the Board, that commercial necessities exist at the present time for permitting a larger percentage. The danger which appertains to the careless use of all the gases named is an obstacle, in the minds of the commissioners, against granting a license in the form contemplated by the statute. Coal gas is used for illuminating purposes, not by reason of its elements of safety, but because of its ease of distribution, convenience, neatness, economy, and the excellence of its light. Its dangers are widely known. Water gas or a mixed gas is somewhat more dangerous; but should its use be wholly prohibited,

if the present state of the art shows that in some communities a better and cheaper light can thereby be supplied, and the increased risk can by care be overcome?

In many cities and towns a mixed gas is served, containing from ten to twenty per cent. of carbonic oxide; in others, water gas having from twenty-five to thirty per cent. of the same constituent. In these places, as a rule, the question of safety or danger does not enter into the calculation; the managers of the gas companies there simply consider the economy and quality of the light, and the same is true of the consumers. As the accidents are chiefly caused by ignorance or carelessness, the general public feels no alarm, as people do not ordinarily charge themselves with being either careless or ignorant. But all intelligent persons agree that too much caution cannot be exercised. When used by watchful, careful consumers, almost any gas can be called safe; but in the hands of the careless or ignorant, the same gas will be dangerous. The more poisonous gas can perhaps be made practically safe by keeping the gas pipes and fixtures tight, by the use of smaller burners, or by providing ample means of ventilation if the gas by any means should escape.

If a thing in itself be dangerous, the knowledge of its character and a warning in its use are likely to prevent harm. How can a certificate of safety be attached, without misleading the very ones whom it is desired to make more careful? Although a mixed gas or water gas is somewhat more rapid in its poisonous effects, if inhaled, than common coal gas, is it not quite probable that a little more care on the part of those who distribute and use the gas may fully offset the increased element of danger it contains? The mere knowledge that it is more harmful would naturally lead people to be more careful. Some of the accidents are caused by defective fixtures or burners; these could be inspected and kept in repair. A company might be required to examine them periodically. If the proportion of carbonic oxide be extended, especially to the degree found in water gas, the size and number of burners in sleeping apartments might be limited, and means of ventilation insisted upon. The attention which has of late been called to deaths by the inhalation of gas has led inventors, with more or less success, towards the discovery of some automatic device for closing the pipe or burner, in case the light is blown out or by some accident the gas is turned on. Something of

the kind might be desirable, especially in lodging rooms. These suggestions are made simply by way of illustration. Other and more effective provisions might be adopted. The Board is firmly of the opinion that the certificate as to safety ought to be omitted from the license. Such a certificate, it is confidently believed, will in no way serve to protect consumers. The Board respectfully suggests that it should have power to place such conditions in the license as in its judgment will tend to guard the community against accidents. The license should also be made revocable, or be subject to modification, as the most practical means of enforcing its provisions and speedily preventing further danger which might be likely to arise.

For these reasons a change of the statute is urged upon the attention of the Legislature. The draft of a bill, embodying the views of the commissioners, is submitted, and the passage of some such act is respectfully and strongly recommended : —

AN ACT TO AMEND CHAPTER FOUR HUNDRED AND TWENTY-EIGHT OF THE ACTS OF THE YEAR EIGHTEEN HUNDRED AND EIGHTY-EIGHT, RELATING TO WATER GAS.

SECTION 1. The board of gas and electric light commissioners may, on such terms and conditions as it deems prudent, license any gas company now or hereafter authorized to make gas for illuminating purposes, to make and sell water gas for such purposes, containing any percentage of carbonic oxide that said board may determine ; and may at any time, after notice to a company so licensed, alter or revoke the license.

SECT. 2. The percentage of carbonic oxide allowed, and the terms and conditions imposed by said board, shall be stated in the license, a copy of which the company shall cause to be delivered to each of its consumers ; and if the company holding the license does not exceed the limit of carbonic oxide so fixed, nor violate any of the terms and conditions contained in the license, it shall be exempt from any penalty or prohibition provided in section fourteen of chapter sixty-one of the Public Statutes, relating to carbonic oxide.

SECT. 3. Chapter four hundred and twenty-eight of the acts of the year eighteen hundred and eighty-eight is hereby repealed.

SECT. 4. This act shall take effect upon its passage.

The following table shows the corporate name, the localities supplied, the capital and the par value of the shares of the companies in active operation on the thirtieth day of June last: —

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Adams Gas Light Co.,	Adams,	\$17,300	\$25
Amesbury & Salisbury Gas Co., .	Amesbury,	60,000	100
Amherst Gas Co.,	Amherst,	10,000	100
Arlington Gas Light Co.,	Arlington,	70,000	100
	Belmont,	—	—
	Winchester,	—	—
Attleborough Gas Light Co., . .	Attleborough,	46,400	100
Bay State Gas Co., ¹	—	500,000	100
Beverly Gas Light Co.,	Beverly,	50,000	100
Boston Gas Light Co.,	Boston (city proper),	2,500,000	500
Brockton Gas Light Co.,	Brockton,	64,000	100
Brookline Gas Light Co.,	Brookline,	450,000	100
	Boston (Brighton District),	—	—
Cambridge Gas Light Co.,	Cambridge,	700,000	100
	Somerville (in part),	—	—
Charlestown Gas Co.,	Charlestown,	500,000	50
	Somerville (in part),	—	—
	Medford (in part),	—	—
Chelsea Gas Light Co.,	Chelsea,	300,000	100
Chicopee Gas Works,	Chicopee Centre,	30,000	—
Citizens' Gas Light Co. of Quincy,	Quincy,	33,000	100
Citizens' Gas Light Co. of South Reading,	Wakefield,	95,300	100
	Reading,	—	—
	Stoneham,	—	—
Clinton Gas Light Co.,	Clinton,	35,000	500
Cottage City Gas & Electric Co., .	Cottage City,	25,000	100
Danvers Gas Light Co.,	Danvers,	20,000	50
Dedham & Hyde Park Gas & Electric Light Co.,	Dedham,	100,000	50
	Hyde Park,	—	—
Dorchester Gas Light Co.,	Boston (Dorchester District),	400,000	100
	Milton,	—	—
East Boston Gas Co.,	Boston (E. Boston),	220,000	25
Easthampton Gas Co.,	Easthampton,	30,000	100
Fall River Gas Works Co.,	Fall River (in part),	288,000	100
Fitchburg Gas Co.,	Fitchburg,	60,000	50
Gardner Gas Light Co.,	Gardner,	30,000	100
Gloucester Gas Light Co.,	Gloucester,	62,300	50
Great Barrington Gas Light Co., .	Great Barrington,	5,000	100
Greenfield Gas Light Co.,	Greenfield,	50,000	50
Haverhill Gas Light Co.,	Haverhill,	75,000	50
	Bradford,	—	—
Ipswich Gas Light Co.,	Ipswich,	16,000	100
Jamaica Plain Gas Light Co., . .	Boston (Ward 23),	200,000	100
Lawrence Gas Co.,	Lawrence,	475,000	100
	Methuen,	—	—

¹ Sells to other companies only.

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Leominster Gas Light Co., . .	Leominster, . .	\$50,000	\$100
Lexington Gas Light Co., . .	Lexington, . .	20,000	100
Lowell Gas Light Co., . .	Lowell, . .	500,000	100
	Dracut, . .	—	—
	Tewksbury, . .	—	—
Lynn Gas & Electric Co., . .	Lynn, . .	375,000	100
	Swampscott, . .	—	—
Malden & Melrose Gas Light Co.,	Malden, . .	220,000	100
	Melrose, . .	—	—
	Medford (in part), .	—	—
	Everett, . .	—	—
Manufacturers' Gas Light Co., .	Fall River (in part),	50,000	100
Marblehead Gas & Electric Light Co., . .	Marblehead, . .	40,000	100
Marlborough Gas Light Co., . .	Marlborough, . .	50,000	100
Middleborough Gas & Electric Co.,	Middleborough, . .	30,000	100
Milford Gas Light Co., . .	Milford, . .	80,000	100
	Hopedale, . .	—	—
Miller's River Gas Light Co., . .	Athol, . .	40,000	100
Mutual Gas Light Co. of South- bridge, . .	Southbridge, . .	15,000	50
Nantucket Gas Light Co., . .	Nantucket, . .	36,000	100
Natick Gas Light Co., . .	Natick, . .	20,000	100
New Bedford Gas Light Co., . .	New Bedford, . .	300,000	100
Newburyport Gas Co., . .	Newburyport, . .	80,000	100
Newton & Watertown Gas Light Co., . .	Newton, . .	200,000	100
	Watertown, . .	—	—
	Wellesley, . .	—	—
	Weston, . .	—	—
North Adams Gas Light Co., . .	North Adams, . .	50,000	100
Northampton Gas Light Co., . .	Northampton, . .	50,000	25
North Attleborough Gas Light Co., . .	North Attleborough, Attleborough Falls, .	68,100	100
	Wrentham, . .	—	—
Norwood Gas Light Co., . .	Norwood, . .	12,000	100
Pittsfield Coal Gas Co., . .	Pittsfield, . .	62,500	100
Plymouth Gas Light Co., . .	Plymouth, . .	40,000	100
Roxbury Gas Light Co., . .	Boston (Roxbury District), . .	600,000	100
Salem Gas Light Co., . .	Salem, . .	300,000	100
	Peabody, . .	—	—
South Boston Gas Light Co., . .	Boston (South Bos- ton), . .	440,000	100
Spencer Gas Co., . .	Spencer, . .	85,000	100
Springfield Gas Light Co., . .	Springfield, . .	500,000	100
Stoughton Gas Light Co., . .	Stoughton, . .	40,000	100
Taunton Gas Light Co., . .	Taunton, . .	80,000	50
Waltham Gas Light Co., . .	Waltham, . .	140,000	100
Webster Electric Co., . .	Webster, . .	45,000	100
	Dudley, . .	—	—
Westfield Gas Light Co., . .	Westfield, . .	54,000	100
Williamstown Gas Co., . .	Williamstown, . .	20,000	100
Woburn Gas Light Co., . .	Woburn, . .	45,100	100
Worcester Gas Light Co., . .	Worcester, . .	500,000	100

The company at Fitchburg furnishes water, that at Gloucester maintains a wharf and supplies water, and that at Springfield furnishes steam for heating. In addition to these, the companies in Amherst, Beverly, Brookline, Charlestown, Chelsea, Clinton, Cottage City, Fitchburg, Lawrence, Lynn, Middleborough, Athol, Southbridge, New Bedford, Newburyport, Newton, Spencer, Stoughton, Waltham, Webster and Westfield, furnish electric light.

The following table shows the names of the owners of gas works not owned by gas companies, the localities supplied, and the estimated value of the plant:—

Chicopee Manufacturing Co.,	Chicopee Falls,	\$15,000 00
Holyoke Water Power Co.,	Holyoke,	100,000 00
T. T. Robinson and W. L. Dresser,	Lee,	10,000 00
Otis Co.,	Ware,	10,000 00

The following companies have bonds and notes outstanding:—

Amherst,	\$1,000 00
Attleborough,	1,500 00
Bay State (Boston),	4,512,000 00
Beverly (special stock),	11,800 00
Beverly (notes),	6,000 00
Brockton,	35,000 00
Brookline,	83,000 00
Charlestown,	5,000 00
Chelsea,	30,000 00
Citizens' (Quincy),	12,500 00
Clinton,	15,000 00
Danvers,	2,000 00
Dedham,	9,000 00
Gardner,	12,500 00
Greenfield,	1,200 00
Haverhill,	37,500 00
Ipswich,	9,183 43
Jamaica Plain,	32,500 00
Lawrence,	15,000 00
Lexington,	1,672 30
Marblehead,	3,000 00
Miller's River (Athol),	20,000 00
Natick,	9,500 00
New Bedford,	193,800 00
Newburyport,	4,500 00
North Adams,	9,000 00
North Attleborough,	68,100 00

South Boston,	\$43,000 00
Spencer,	85,000 00
Springfield,	75,000 00
Stoughton,	40,000 00
Waltham,	20,000 00
Webster,	30,000 00
Westfield,	26,000 00
Worcester,	20,000 00

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value of the stock held within the Commonwealth:—

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at Par of Stock held in Massachusetts.
Adams,	8	8	\$17,300
Amesbury,	14	7	30,300
Amherst,	21	21	10,000
Arlington,	58	42	46,900
Attleborough,	22	20	45,600
Bay State (Boston),	8	6	600
Beverly,	28	28	50,000
Boston,	6	4	2,000
Brockton,	49	48	63,900
Brookline,	141	130	414,200
Cambridge,	387	343	626,500
Charlestown,	239	227	470,900
Chelsea,	127	122	295,600
Chicopee,	2	2	30,000
Citizens' (Quincy),	45	43	32,900
Citizens' (Wakefield),	68	60	68,600
Clinton,	18	18	35,000
Cottage City,	10	10	25,000
Danvers,	30	30	20,000
Dedham,	40	33	66,650
Dorchester,	10	10	400,000
East Boston,	123	105	198,250
Easthampton,	38	33	27,300
Fall River,	10	7	13,200
Fitchburg,	29	27	54,150
Gardner,	3	3	30,000
Gloucester,	61	58	61,350
Great Barrington,	5	5	5,000
Greenfield,	35	25	43,700
Haverhill,	62	54	64,000
Ipswich,	28	28	16,000
Jamaica Plain,	134	128	191,100
Lawrence,	194	177	429,400
Leominster,	61	55	48,500
Lexington,	21	20	19,900
Lowell,	259	220	448,300
Lynn,	166	158	367,500

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at Par of Stock held in Massachusetts.
Malden,	145	125	\$189,200
Manufacturers' (Fall River),	7	7	50,000
Marblehead,	29	23	32,500
Marlborough,	12	12	50,000
Middleborough,	6	5	24,000
Milford,	51	48	72,300
Miller's River (Athol),	14	11	28,100
Mutual (Southbridge),	27	26	13,500
Nantucket,	54	48	34,500
Natick,	38	38	20,000
New Bedford,	220	196	275,500
Newburyport,	64	54	72,300
Newton,	172	166	194,200
North Adams,	43	29	43,800
Northampton,	39	28	30,025
North Attleborough,	36	83	67,400
Norwood,	10	9	10,100
Pittsfield,	51	42	30,700
Plymouth,	30	24	31,700
Roxbury,	7	5	600
Salem,	250	227	277,900
South Boston,	29	25	43,800
Spencer,	16	16	85,000
Springfield,	114	105	466,500
Stoughton,	15	15	40,000
Taunton,	103	96	76,100
Waltham,	108	101	129,500
Webster,	18	18	45,000
Westfield,	22	19	47,700
Williamstown,	3	3	20,000
Woburn,	50	48	43,400
Worcester,	188	178	462,400

The following statistics exhibit the aggregate receipts and expenses of all the companies in the State, compiled from the items relating to the manufacture and sale of gas in the last two returns made to the Board:—

	FOR YEAR ENDING JUNE 30.	
	1888.	1889.
RECEIPTS:—		
For gas sold by meter,	\$3,900,416 07	\$4,027,049 67
For gas supplied to public lamps,	396,876 29	352,934 84
From sales of coke,	360,434 83	350,451 47
sales of tar,	81,646 59	92,945 78
sales of ammoniacal liquor,	24,060 09	29,777 98
rent of meters,	768 18	1,544 18
rent of gas stoves and engines,	1,449 88	2,325 47
rent of gas lamps,	1,921 15	2,239 37
public lamps other than gas lamps,	9,496 81	9,864 29
other sources,	120 12	209 06
Total,	\$4,777,190 01	\$4,869,342 11
EXPENSES:—		
1. Coals,	\$1,254,694 21	\$1,289,489 57
2. Enrichers,	133,559 06	125,055 99
3. Purifying materials,	44,420 95	42,071 39
4. Water,	25,535 53	22,259 42
5. Wages at works,	643,727 12	629,837 46
6. Repairs and maintenance of works (including renewal of retorts),	255,144 43	268,904 45
7. Apparatus and machinery,	14,752 25	31,087 38
8. Wages of meter takers, clerical labor in distribution, and salary or com- mission of collectors,	101,307 91	83,421 68
9. Repairs, renewals, and maintenance of mains and service pipes,	112,363 78	137,860 60
10. Repairs and renewals of meters,	59,407 66	50,386 15
11. Lighting and repairing (gas lamps only),	14,340 12	13,686 35
12. Lighting and repairing, and materials used for other lamps,	8,405 31	8,497 28
13. Directors' allowances,	3,234 50	4,108 83
14. Salaries of officers,	119,667 66	109,540 96
15. General salaries,	98,445 09	99,366 76
16. Rent of offices,	11,028 59	10,867 19
17. General office expenses,	41,137 03	32,340 14
18. Taxes,	266,357 70	266,810 18
19. Fire insurance,	6,398 33	11,190 44
20. Law expenses,	27,504 81	16,863 57
21. Claims,	10,365 50	601 47
22. Bad debts,	18,857 98	19,975 37
23. Incidental expenses,	57,255 12	40,115 35
Total,	\$3,327,910 64	\$3,314,337 98

	FOR YEAR ENDING JUNE 30.	
	1888.	1889.
Leaving an apparent net profit on their gas business of	\$1,449,279 37	\$1,555,004 13
They have also received for interest,	23,141 52	26,534 00
They have also received for rents, etc.,	50,513 11	54,087 83
They have also received from electric lighting,	23,089 32	54,318 62
Making a total,	\$1,546,023 32	\$1,689,944 58
From these receipts were paid interest on bonds and loans,	\$44,340 02	\$46,350 60
Dividends,	941,481 00	1,021,847 00
Other items,	13,020 10	18,186 52
	\$998,841 12	\$1,086,384 12
Leaving a surplus for the year of	\$547,182 20	\$603,560 46

Four of the companies appear not to have earned expenses ; seven others have not earned sufficient to warrant the declaring of any dividend on their capital ; and seven others have paid a part of their dividends from the surplus of former years. The Greenfield Gas Light Company, which showed no surplus at the beginning of the year, has paid out about \$600 more than the net earnings. The Roxbury Gas Light Company has, in addition to its regular dividend, divided its reserve fund of \$150,000 among its stockholders.

The receipts for gas sold by meter, notwithstanding a reduction in average price, show a gain this year of about \$127,000, while those from street lights fall off about \$44,000, or eleven per cent. ; which would seem to show that the increase of electric lighting, while affecting the gas companies' street lighting, has not as yet reduced the receipts from sales through meters.

In the Appendix will be found, under date of June 30, 1889, the separate balance sheets of the companies, as taken from the annual returns, with corrections made by the Board after examination and correspondence with the officers of the several companies.

Aggregates from these balance sheets and those in the returns of 1888 show the following facts : —

	YEAR ENDING JUNE 30.	
	1888.	1889.
ASSETS : —		
Real estate, machinery, street mains and meters,	\$13,662,855 25	\$17,943,671 20
Cash on hand,	632,129 77	624,277 27
Due for gas,	449,617 47	467,951 27
Other accounts due,	64,225 52	102,735 70
Materials, etc.,	623,092 85	577,530 08
Notes receivable,	282,928 05	168,638 66
Investments,	303,626 95	321,334 10
Electric plants,	341,174 37	724,527 79
	\$16,359,650 23	\$20,930,666 07
LIABILITIES : —		
Capital stock,	\$12,384,100 00	\$12,705,000 00
Bonds,	300,262 00	346,100 00
Notes payable,	554,856 52	5,156,181 82
Unpaid bills,	119,936 50	77,753 08
Unpaid dividends,	34,914 50	31,970 50
Deposits,	22,687 51	26,145 01
Interest due and unpaid,	6,538 82	3,219 93
Other items,	48,008 89	29,172 30
	\$13,471,304 74	\$18,375,542 64
Reserved and depreciation funds,	628,804 46	545,293 67
	\$14,100,109 20	\$18,920,836 31
Surplus,	2,259,541 03	2,009,829 76
	\$16,359,650 23	\$20,930,666 07

Of these companies —

57 ¹ show an aggregate surplus of	\$2,356,956 89	\$2,161,375 50
9 ² show an aggregate deficit of	97,415 86	151,545 74
Leaving total net surplus, as shown above,	\$2,259,541 03	\$2,009,829 76
Which, added to reserves carried as liabilities,	628,804 46	545,293 67
Would show an actual surplus of	\$2,888,345 49	\$2,555,123 43
Equivalent to per cent. on capital of about	23	20

¹ 56 in 1888.

² 8 in 1888.

The following table shows the valuation of the property of each company, as assessed by the local assessors : —

NAME OF COMPANY.	Assessed Value.	NAME OF COMPANY.	Assessed Value.
Adams,	\$13,900	Lexington,	\$1,500
Amesbury,	22,500	Lowell,	1,118,630
Amherst,	10,000	Lynn,	183,000
Arlington,	35,150	Malden,	131,700
Attleborough,	20,200	Manufacturers' (Fall	
Bay State (Boston),	501,300	River),	48,900
Beverly,	23,225	Marblehead,	13,800
Boston,	4,269,100	Marlborough,	14,000
Brockton,	76,500	Middleborough,	9,000
Brookline,	402,600	Milford,	76,400
Cambridge,	674,300	Miller's River (Athol),	12,800
Charlestown,	622,800	Mutual (Southbridge),	7,700
Chelsea,	273,900	Nantucket,	6,000
Chicopee,	32,000	Natick,	12,200
Chicopee Falls,	10,000	New Bedford,	462,442
Citizens' (Quincy),	25,000	Newburyport,	45,200
Citizens' (Wakefield),	22,000	Newton,	268,200
Clinton,	31,800	North Adams,	16,000
Cottage City,	6,977	Northampton,	51,800
Danvers,	4,000	North Attleborough,	57,300
Dedham,	34,800	Norwood,	11,000
Dorchester,	298,200	Pittsfield,	64,500
East Boston,	181,400	Plymouth,	22,350
Easthampton,	29,500	Roxbury,	622,900
Fall River,	232,300	Salem,	327,100
Fitchburg,	60,825	South Boston,	390,500
Gardner,	12,000	Spencer,	30,600
Gloucester,	58,500	Springfield,	547,770
Great Barrington,	1	Taunton,	64,400
Greenfield,	31,000	Waltham,	178,300
Haverhill,	122,500	Ware,	9,100
Holyoke,	100,000	Webster,	10,300
Ipswich,	5,400	Westfield,	52,500
Jamaica Plain,	192,700	Woburn,	45,100
Lawrence,	395,000	Worcester,	606,000
Lee,	2,100		
Leominster,	20,000	Total,	\$14,372,169

¹ Not returned.

The following table shows the amount paid by each company for taxes, and the amount for each thousand feet of gas sold :—

NAME OF COMPANY.	Amount of Taxes paid.	Amount per Thousand sold.
Adams,	\$423 48	\$0 0765
Amesbury,	735 05	1928
Amherst,	157 71	1731
Arlington,	995 12	1817
Attleborough,	439 69	0745
Bay State (Boston),	6,845 75	—
Beverly,	272 16	0491
Boston,	72,315 52	0604
Brockton,	1,419 93	1070
Brookline,	5,724 15	1124
Cambridge,	17,999 21	1636
Charlestown,	11,556 98	1560
Chelsea,	6,082 27	1927
Chicopee,	635 95	0740
Citizens' (Quincy),	229 88	0473
Citizens' (Wakefield),	545 35	1267
Clinton,	538 88	0822
Danvers,	91 80	0787
Dedham,	838 46	1303
Dorchester,	6,105 16	1086
East Boston,	5,099 97	1472
Easthampton,	470 05	1250
Fall River,	6,566 76	1401
Fitchburg,	1,266 65	0820
Gardner,	240 77	3066
Gloucester,	1,299 67	1037
Greenfield,	585 65	2026
Haverhill,	2,207 02	0505
Holyoke,	2,071 54	0494
Ipswich,	84 32	0632
Jamaica Plain,	4,363 11	1397
Lawrence,	9,192 82	1370
Lee,	41 37	1589
Leominster,	502 14	2593
Lexington,	74 49	0885
Lowell,	18,608 48	0930
Lynn,	5,336 80	0964
Malden,	2,857 50	1033
Manufacturers' (Fall River),	964 21	0791
Marblehead,	638 14	2034
Marlborough,	333 83	0771
Middleborough,	127 33	—
Milford,	1,233 81	1454
Miller's River (Athol),	177 90	0720
Mutual (Southbridge),	222 25	1821
Nantucket,	151 27	0701
Natick,	393 71	1149
New Bedford,	6,208 62	1458
Newburyport,	1,265 93	1282

NAME OF COMPANY.	Amount of Taxes paid.	Amount per Thousand sold.
Newton,	\$4,672 00	\$0 1051
North Adams,	670 79	0399
Northampton,	744 10	0739
North Attleborough,	1,128 16	0997
Norwood,	164 19	0833
Pittsfield,	1,905 25	1486
Plymouth,	450 85	1092
Roxbury,	14,250 88	0923
Salem,	5,394 58	1419
South Boston,	6,806 69	1101
Spencer,	1,364 45	1525
Springfield,	8,092 36	1053
Taunton,	1,724 40	0522
Waltham,	2,613 36	0945
Ware,	174 99	0421
Westfield,	676 70	1171
Woburn,	1,101 57	1432
Worcester,	10,836 23	1034
Total,	\$269,310 16	—

The total sum paid by the companies for taxes, including State inspection, was \$269,310.16, an average of $9\frac{68}{100}$ cents per thousand feet sold; being an increase over the previous year in the total amount of \$2,952.46, and a decrease of $1\frac{1}{100}$ cents per thousand feet of gas sold.

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table:—

NAME OF COMPANY.	Rate per Cent.	Amount of Dividends.	Amount per Thousand sold.
Adams,	20	¹ \$3,460	\$0 6253
Amesbury,	—	² —	—
Amherst,	8	800	8784
Arlington,	6	4,200	7667
Attleborough,	6	2,784	4717
Bay State (Boston),	—	² —	—
Beverly { Special stock,	6	708	1277
{ Ordinary stock,	7½	3,450	6224
Boston,	10	³ 250,000	2237
Brockton,	7	4,480	3402
Brookline,	6	27,000	5301
Cambridge,	10	70,000	6362
Charlestown,	10	50,000	6751
Chelsea,	6	18,000	5703
Chicopee,	12	3,600	4948
Citizens' (Quincy),	6	1,980	4074
Citizens' (Wakefield),	2	1,906	4402
Clinton,	3	1,050	1611
Danvers,	—	² —	—
Dedham,	2½	2,500	3886
Dorchester,	9	⁴ 36,000	6405
East Boston,	10	22,000	6350
Easthampton,	9	2,700	7178
Fall River,	9	25,920	5531
Fitchburg,	10	6,000	3885
Gardner,	—	² —	—
Gloucester,	8	⁵ 4,984	3994
Great Barrington,	—	² —	—
Greenfield,	4	2,040	7048
Haverhill,	10	7,500	1717
Ipswich,	—	² —	—
Jamaica Plain,	8	16,000	5123
Lawrence,	8	34,000	5067
Leominster,	4½	2,250	1 1609
Lexington,	—	² —	—
Lowell,	12	60,000	2999

¹ In addition to the dividend, a rebate is allowed to mills owning stock on the gas used by them.

² No dividend declared.

³ An additional dividend of \$3.56 per share, amounting to \$17,800, was paid in March, 1889.

⁴ Two per cent. extra, being one-half the August dividend, was paid in April, on account of change in ownership of the stock.

⁵ An additional dividend of four per cent. was declared from earnings of wharf property.

NAME OF COMPANY.	Rate per Cent.	Amount of Dividends.	Amount per Thousand sold.
Lynn,	6½	\$22,125	\$0 3999
Malden,	6	10,200	3689
Manufacturers' (Fall River),	10	5,000	4105
Marblehead,	2½	1,000	3187
Marlborough,	—	1 —	—
Middleborough,	—	1 —	—
Milford,	9	6,892	8123
Miller's River (Athol),	—	1 —	—
Mutual (Southbridge),	6	900	7375
Nantucket,	5	1,800	8345
Natick,	8	1,600	4670
New Bedford,	8	23,000	5400
Newburyport,	18	14,400	1 4577
Newton,	8	16,000	3601
North Adams,	8	4,000	2378
Northampton,	8	4,000	3972
North Attleborough,	6	4,086	3612
Norwood,	—	1 —	—
Pittsfield,	16	10,000	7799
Plymouth,	6	2,400	5815
Roxbury,	10	60,000	3885
Salem,	6	18,000	4733
South Boston,	8	35,200	5693
Spencer,	—	1 —	—
Springfield,	8	40,000	5202
Taunton,	15	12,000	3632
Waltham,	6	8,400	3038
Westfield,	8	4,320	7741
Woburn,	8	3,608	4689
Worcester,	6½	32,500	3101
Total,	—	\$1,006,743	—

¹ No dividend declared.

PRICE OF GAS.

Between June 30, 1888, and June 30, 1889, the following companies made reductions in the price of gas :—

Amesbury,
Attleborough,
Beverly,
Chelsea,
Chicopee,
Clinton,
Danvers,
Dedham,
Dorchester,

Leominster,
Marblehead,
Middleborough,
Natick,
North Attleborough,
Roxbury,
Taunton,
Woburn.

Of these companies, six made reductions in the price of gas in 1888, and seven in 1887.

The company at Spencer sold gas during the quarter ending Oct. 1, 1888, for \$1.00 per thousand, but on that date raised the price to \$1.25.

The following pages show the price charged by the several companies June 30, 1889; the average candle-power, as shown by the tests made by the State inspector of gas; and the average price per thousand feet, sold by meter, received in the two years ending June 30, 1889.

The gas made is coal gas, except where otherwise noted.

NAME OF COMPANY.	Average Candle- power.	Gross Price.	REMARKS.	Average Price, 1887-88.	Average Price, 1888-89.
Adams,	16.73	\$3 00	Twenty per cent. discount, if paid within 5 days from date of bill,	\$2 39	\$2 39
Amesbury,	21.20	2 25	Houses and stores, \$2.25 and \$2; carriage shops, \$1.75; cotton mills, \$1.50, less 15 cents; gas engines, \$1. Water gas.	2 02	1 91
Amherst,	39.75	6 00	If bill amounts to \$5, discount 5 per cent.; to \$10, 10 per cent.; to \$20, 15 per cent.; to \$50, 30 per cent.; to \$75, 25 per cent. Oil gas, with 5 to 8 per cent. air	5 30	5 41
Arlington,	17.40	2 75	Discount of 40 cents per M to consumers of 10,000 feet and upward; 20 cents per M to consumers of over 1,000 feet and less than 10,000 feet burned during the quarter.	2 68	2 75
Artleborough,	17.43	2 00	Discounts: 10 cents per M allowed to monthly consumers at the end of the year, if their bills have exceeded \$1,000, and have been paid promptly.	2 25	2 00
Beverly,	17.13	2 75	Discounts: On 1,000 feet and under, 10 cents per M; on 1,000 to 5,000 feet, 15 cents per M; 5,000 feet and over, 25 cents per M, if paid within 10 days.	2 57	2 42
Boston,	17.91	1 30	To some large consumers, \$2.	1 31	1 27
Brockton,	18.13	2 25	Twenty five cents per M allowed, if paid by the 25th of the month. Large consumers, 35 cents, 45 cents, 50 cents; largest, 65 cents per M allowed.	2 09	2 03
Brookline,	18.31	2 20	Discount 25 cents per M, if paid in 15 days. Coal gas and water gas,	2 18	2 18
Cambridge,	17.29	2 00	Ten cents per M discount to consumers burning over \$500 worth per year,	1 70	1 71
Charlestown,	17.17	2 00	Discount 50 cents per M on bills paid within 10 days. Special discounts to manufacturing corporations.	1 72	1 72
Chelsea,	18.67	2 00	Large consumers, \$3. Oil gas, with 30 per cent. air,	1 94	1 97
Chicopee,	16.47	2 75	Discounts: 33½ per cent. to business houses; 5 per cent. to dwellings, if paid by the 10th of the month.	1 82	1 82
Chicopee Falls,	30.30	4 00	Discount 10 per cent. on bills amounting to \$500 per year,	3 63	3 57
Citizens' (Quincy),	16.80	3 00	Discount 5 per cent. on bills paid within 10 days. Large consumers, \$1.50 to \$2, but no discount.	2 70	2 44
Citizens' (Wakefield),	17.15	2 50	Discount 10 per cent., if paid on or before the 15th of the month. Discount to gas stoves, \$1.	3 35	2 46
Clinton,	18.95	2 50	Discount 50 cents per M, for payment before the 16th of the month,	2 15	2 19
Danvers,	15.45	3 00	Discount 50 cents per M, for payment within 10 days,	3 20	2 87
Dedham,	16.83	3 00	Discount 63 per cent., making \$2.80 net. To the town, and consumers using 50,000 feet a year, the bills are made at \$2.50, with a discount at 4 per cent., making net price \$2.40.	2 59	2 47
Dorchester,	17.01	2 50		2 24	2 15
East Boston,	18.04	1 75		1 76	1 76
Easthampton,	15.70	3 00		2 50	2 51

NAME OF COMPANY.	Average Candle- power.	Gross Price.	RE MARKS.	Average Price, 1887-88.	Average Price, 1888-89.
Fall River,	18.94	\$2 00	Discounts : 25 cents per M, if paid by the 15th of the month. Large consumers, \$1.75, with discount as above.	\$1 58	\$1 58
Fitchburg,	17.96	2 00	Some special contracts.	1 87	1 81
Gardner,	47.20	6 00	Discounts vary with amount used. Pure oil gas.	5 61	4 50
Gloucester,	18.22	2 00	Discount 10 per cent., if paid on or before 15th of the month,	1 80	1 80
Great Barrington,	21.00	3 50	Oil gas, with 20 per cent. air,	4 80	3 50
Greenfield,	17.95	2 50	On bills of \$2.50 per month, 5 per cent. discount, if paid in 5 days; on bills of \$25, 10 per cent.	2 38	2 37
Haverhill,	18.32	1 70	Discount 20 cents per M, if paid on or before the 10th. Day consumption, \$1.25, .	1 52	1 49
Holyoke,	17.86	2 00	Discount 25 per cent. to manufacturers and mills; 12½ per cent. to merchants and dwelling houses : \$1.25 to gas engines.	1 74	1 61
Ipswich,	26.60	3 50	To some consumers, \$2.50. Oil gas, with 25 per cent. of air,	3 05	2 90
Jamaica Plain,	17.57	2 50	Fifty cents per M discount on bills paid within 15 days. City buildings 5 per cent. off net price.	2 20	2 00
Lawrence,	17.21	1 70	Ten cents per M discount, if paid before the 15th of the month. Between 250,000 and 800,000 feet per year, \$1.50, less 10 cents; over 800,000, \$1.30 net.	1 43	1 44
Lee,	55.00	7 50	Pure oil gas,	7 50	7 50
Leominster,	27.75	4 00	Oil gas, with 50 per cent. air,	4 78	4 05
Lexingt n,	29.25	6 00	Discount 10 per cent. for prompt payment. A few large consumers, special rates.	5 70	5 22
Lowell,	18.12	1 30	Oil gas, with 33½ per cent. air.	1 19	1 10
Lynn,	18.18	2 00	Discount 20 cents per M, if paid within 5 days, Gas engines, 50 per cent. discount. Coal gas and water gas.	1 79	1 77
Malden,	17.33	2 20	Discount 20 cents per M, if bills are paid by 20th of month. Factories and large consumers, 40 cents, 45 cents, 60 cents and 70 cents per M, discount.	1 99	1 95
Manufacturers' (Fall River),	17.85	2 00	Discount on less than 500 feet per month, 10 cents per M; on more than 500 feet, 25 cents per M, if paid on or before the 20th of the month. Manufacturing corporations, \$1.50 net.	1 54	1 54
Marblehead,	16.95	3 00	Discount 10 per cent., if paid before the 16th of the month. Manufacturers, 50 cents per M discount; town, 60 cents per M; gas engines, stoves and heating machines in factories, \$1 per M discount.	2 61	2 72
Marlborough,	17.90	2 50	Discount 10 per cent. to large consumers,	2 45	2 12
Middleborough,	46.70	5 00	Lowest price to manufacturers, \$4 per M. Pure oil gas,	4 09	5 40
Milford,	16.80	2 00	Five per cent. discount on bills exceeding \$50 per month,	1 97	1 97

Miller's River (Athol),	15.25	3 00	Discount 50 cents per M, if paid within 10 days; 5 per cent. additional to small mills, etc.; 10 per cent. to large mills, etc. Water gas.	2 39	2 31
Mutual (Southbridge),	23.80	3 00	Discount 5 per cent. to all consumers of 2,000 feet per month or over, for mechanical purposes and hotel. Oil gas, with 30 to 40 per cent. air.	3 00	3 00
Nantucket,	15.85	3 00	Largest consumers, discount of 50 cents per M.	2 96	2 88
Natick,	17.53	2 45	Discount 10 cents per M, if paid on or before the 15th of the month; 20 cents per M to consumers of 10,000 feet in any one quarter.	2 56	2 35
New Bedford,	17.26	2 00	Discount 10 per cent., for payment in 5 days; and 25 per cent. on consumption of 4,000 feet per month.	1 59	1 56
Newburyport,	17.75	2 50	Discount 20 per cent. on bills of 1,000 feet or more per month; 10 per cent. on all less than 1,000 feet per month, for prompt payment.	2 07	1 98
Newton,	17.58	2 25	Consumption of 100,000 feet per year, \$1.30 net; 200,000 feet, \$1.80; 300,000 feet, \$1.75; 400,000 feet, \$1.70; day consumption by special meter, \$1.50; general consumers, 25 cents per M discount for cash in 20 days.	1 97	1 96
North Adams,	17.18	2 00	To some consumers, \$1.75.	1 91	1 90
Northampton,	17.43	2 00	To large consumers, 5 per cent. discount, if paid within 5 days.	1 98	1 91
North Attleborough,	16.67	2 50	Discount 50 cents per M, if paid on or before the 16th of the month.	2 23	2 01
Norwood,	-	3 00	If paid within 15 days, discount of 30 cents per M. Special prices to large consumers and churches.	2 47	2 36
Pittsfield,	18.80	2 50	Discount 10 per cent. on bills of less than 1,000 feet per month; 20 per cent. on bills of 1,000 feet and less than 25,000; 70 cents per M on bills of 25,000 feet or over.	1 99	1 96
Plymouth,	17.40	2 50	Special price to large consumers.	2 21	2 16
Roxbury,	17.97	1 75	Discount of 15 cents per M, if paid on or before the 12th of the month; 5 per cent. additional to consumers whose bills amount to \$500 a year.	1 74	1 61
Salem,	18.00	2 00	Discount 10 per cent., if paid on or before the 15th of the month.	1 80	1 80
South Boston,	17.80	2 00	Discount 10 per cent., if paid on or before the 18th of the month; price to large consumers, \$1.50.	1 78	1 77
Spencer,	19.40	1 25	One dollar and sixty-five cents net for bills averaging \$600 per year; \$1.25 for gas used by city.	1 25	1 21
Springfield,	18.58	1 75	Pure oil gas.	1 74	1 69
Stoughton,	-	6 00	Over 125,000 feet per quarter, \$1.40 per M.	-	-
Taunton,	17.69	1 50	Discount 20 per cent., if paid by the 15th of the month.	1 59	1 52
Waltham,	17.74	2 50	Public institutions, \$2.	1 75	1 74
Ware,	16.77	2 50	Five per cent. discount for cash; 5 per cent. additional for consumption of 50,000 feet per year.	2 53	2 38
Webster,	18.90	2 50	Twenty cents per M discount, if paid on or before the 15th of the month.	2 65	2 50
Westfield,	17.13	2 50	Discount of 30 cents per M, if paid on or before the 15th of the month.	2 33	2 26
Woburn,	17.80	2 00		1 99	1 93
Worcester,	17.97	1 80		1 51	1 50

The average price to consumers for coal gas, of twenty-four companies making annually more than 30,000,000 feet each, is \$1.4495 per thousand feet. The average price of the remainder of the coal-gas companies is \$1.9287, making an average for all of \$1.4935 per thousand. The average price for oil gas is \$4.1608 per thousand feet. The average price for coal gas in 1886 was \$1.72, in 1887 it was \$1.66, and in 1888 it was \$1.56, per thousand feet, showing a gradual reduction each year.

Coal gas is sold in this State at forty-one different prices, varying from \$1.00 to \$3.15 per thousand feet. Although no company in the State offers gas to the general consumer at \$1.00 a thousand feet, yet there were 203,524,000 feet sold at that price the last year. The quantity sold at \$1.10 was 203,040,000 feet, and 13,594,000 feet were sold at \$1.25. The largest amount sold at one price was 1,051,689,000 feet, at \$1.30 per thousand. There were 267,052,000 feet sold at \$1.50, 230,915,000 feet at \$1.75, and 220,244,000 at \$2.00. Only 249,000 feet were sold at \$3.15, — the highest price charged. Nearly two-thirds of all the coal gas furnished in the State was sold at a price not exceeding \$1.50 per thousand feet. Many companies are now manifesting a desire to sell gas at as low a price as is consistent with the cost of manufacture and distribution, and reasonable dividends on the capital invested. The increase in the output of gas has been large during the past few years, notwithstanding the inroads made on the business of lighting by electric companies in furnishing commercial as well as public lights. This increase is due, no doubt, to a considerable extent to the reduction in price made by most of the companies during the past five years, some of which have made several reductions during that time. The larger companies are also giving a great deal of study to a more economical manufacture of gas and a more profitable sale of residuals, as well as to the best methods of increasing the output, with a view of still further lowering the price. There is also much time and study given at present to the question of fuel gas, the object being to find a process by which it can be manufactured at so low a price that it will supersede other kinds of fuel for heating boilers, buildings, and for domestic purposes. Although there are enthusiasts who are apparently very confident that this will soon be attained, no effort should be relaxed

by the companies to increase their output for heating as well as illuminating purposes. Many writers on the use of gas for fuel believe that illuminating gas can be used to better advantage for domestic purposes, owing to its greater heating qualities and the convenience of having but one set of distributing pipes.

The following table shows the amount of gas made in the year ending June 30, 1889, and in the year ending June 30, 1888; the amount sold by meter and to public lamps in both these years; the amount used at works and offices, and the amount of gas unaccounted for during the year ending June 30, 1889; and the percentage of unaccounted-for gas both years.

Coal Gas.

NAME OF COMPANY.	Gas made Year ending June 30, 1889.	Gas made Year ending June 30, 1888.	Gas sold by Meter Year ending June 30, 1889.	Gas sold by Meter Year ending June 30, 1888.	Gas sold for Public Lamps Year ending June 30, 1889.	Gas sold for Public Lamps Year ending June 30, 1888.	Gas used at Works and Offices Year ending June 30, 1889.	Gas unaccounted for, Year ending June 30, 1889.	Percent. time counted for, 1888-89.	Percent. time counted for, 1887-88.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.		
Adams,	6,420,000	7,716,500	4,008,714	5,392,470	625,000	625,000	15,000	871,286	13.57	22.83
Amesbury,	4,494,592	4,492,975	3,692,000	3,687,800	100,000	100,000	30,000	761,992	10.51	13.47
Arlington,	6,900,780	7,190,540	6,478,084	4,092,628	-	-	100,000	1,412,295	20.18	20.02
Attleborough,	6,908,500	6,935,000	5,001,575	5,821,400	-	-	57,000	949,325	13.74	14.40
Beverly,	6,485,200	6,406,000	5,105,200	4,501,600	347,700	346,700	105,000	786,900	12.23	21.66
Bay State,	23,566,000	-	21,893,000	-	-	-	342,000	1,263,000	6.46	-
Boston,	21,287,646,700	1,222,223,300	1,144,007,393	1,078,622,700	53,239,670	55,171,000	-	80,585,253	6.75	6.15
Brookline,	15,080,000	13,170,000	12,754,300	12,754,300	13,473,132	12,045,374	180,100	2,273,200	15.13	18.12
Brookline,	53,434,500	37,437,300	32,476,700	32,476,700	10,523,400	10,602,704	237,100	6,294,885	10.93	14.60
Cambridge,	120,756,000	117,743,000	99,485,406	94,840,576	13,423,278	14,353,842	1,142,000	9,070,298	7.65	9.35
Charlestown,	86,908,000	86,908,000	60,444,250	58,809,623	3,816,195	4,656,223	1,005,000	11,513,472	13.33	14.70
Chelsea,	38,175,000	39,774,000	27,745,507	26,008,100	3,816,195	4,656,223	300,000	6,216,308	16.28	21.73
Chicago,	8,877,700	9,707,000	7,252,000	7,800,000	22,508	170,448	75,000	1,629,522	17.19	17.03
Citizens' (Quincy),	6,728,000	7,752,000	4,285,200	3,636,000	575,200	1,455,100	392,900	1,476,100	21.94	15.02
Citizens' (Wakfield),	5,985,253	5,721,200	3,921,400	3,670,900	408,043	584,900	84,020	1,571,800	26.25	27.15
Clinton,	8,502,100	7,904,840	6,480,100	6,355,000	-	-	219,000	1,837,180	21.02	17.13
Danvers,	1,735,100	1,825,700	1,103,100	1,114,000	34,920	27,446	35,000	541,700	31.13	33.12
Dedham,	8,234,130	7,665,000	6,841,200	6,472,100	502,400	507,300	249,000	1,551,430	18.48	10.80
Dorchester,	84,150,209	87,819,000	35,554,100	29,026,800	20,452,171	19,895,555	-	7,092,920	12.40	10.84
East Boston,	38,726,640	27,494,000	23,406,400	22,004,000	11,226,524	10,926,355	268,700	3,815,015	8.85	10.84
Easthampton,	4,407,680	3,800,000	3,696,100	2,095,400	125,100	180,400	60,000	586,480	13.30	17.17
East River,	53,433,200	60,507,700	43,327,200	40,145,500	3,536,376	2,943,234	-	6,573,024	12.30	13.79
Fitchburg,	17,127,100	16,393,700	14,693,500	14,207,200	800,000	850,000	500,000	1,104,300	6.81	6.65
Gloucester,	13,924,000	12,422,000	11,676,800	10,241,400	802,570	716,792	100,000	1,344,630	6.65	10.68
Greenfield,	3,831,100	4,015,700	2,801,500	2,992,608	-	-	83,800	854,900	22.31	24.51
Haverhill,	40,238,000	42,875,000	40,289,500	38,474,700	3,384,200	2,003,700	250,000	2,314,300	6.00	2.52
Holyoke,	48,158,411	46,411,170	30,612,300	28,042,300	471,100	308,840	312,000	5,922,011	12.30	11.16
Jamaica Plain,	32,354,300	10,255,100	10,255,100	10,800,501	11,374,552	10,503,120	500,000	3,176,618	9.10	13.57
Lawrence,	74,251,200	80,425,800	67,000,185	71,896,000	-	-	548,100	5,570,052	6.72	10.02
Lowell,	214,101,000	192,038,000	192,423,800	176,148,000	7,616,100	7,530,700	2,167,200	11,800,900	6.51	3.35
Lynn,	64,940,300	52,904,500	43,898,100	43,898,100	2,427,300	2,513,100	931,000	8,676,700	13.39	14.09
Malden,	30,460,500	32,068,200	27,101,500	25,284,300	549,000	2,706,200	304,000	2,611,100	8.24	11.91
Manufacturers' (Fall River),	13,504,000	13,297,000	7,790,270	7,790,270	908,000	2,706,200	142,000	1,570,000	6.34	11.91
Norwich,	3,785,900	2,687,870	2,687,870	3,140,200	404,152	378,930	149,000	542,511	13.16	13.08
Norwich,	6,358,540	4,920,240	4,250,500	3,826,600	67,670	88,170	104,418	926,952	17.30	18.15

Milford,	9,242,130	9,158,000	8,002,400	8,108,800	302,126	410,000	66,100	601,500	7.40	6.42
Miller ^a River	2,800,000	3,250,000	2,409,700	2,125,800	50,000	425,000	75,000	265,000	9.46	13.82
Nantucket,	2,491,370	2,571,700	1,697,420	1,501,000	482,810	474,800	47,800	286,000	11.50	17.80
Natick,	3,688,300	3,711,900	3,133,300	3,691,300	200,000	119,000	90,000	171,000	4.04	10.27
New Bedford,	46,887,000	47,947,100	30,133,900	30,787,000	4,428,000	6,721,000	550,000	3,652,500	7.81	8.21
Newburyport,	11,407,780	10,603,000	8,877,800	8,712,000	—	660,000	234,000	1,295,980	11.36	9.71
Newton,	49,510,900	45,298,000	38,562,700	34,699,400	5,892,700	5,545,420	480,800	4,594,700	9.28	10.17
North Adams,	29,183,200	17,076,600	14,010,400	12,697,800	2,210,100	—	487,400	2,875,400	14.25	12.29
Northampton,	11,032,800	10,670,700	10,071,500	9,449,500	—	—	90,800	801,300	7.81	10.42
North Attleborough,	12,539,100	12,047,810	11,311,800	10,835,700	—	—	153,300	1,004,000	8.71	8.90
Norwood,	4 ^c	4 ^c	1,008,000	1,292,400	—	—	4 ^c	4 ^c	—	—
Pittsfield,	14,924,000	14,118,000	11,908,800	11,376,850	913,680	927,000	215,000	1,886,720	12.64	11.32
Plymouth,	4,206,170	4,126,830	3,803,400	3,413,000	323,740	321,010	85,030	53,080	1.24	6.91
Roxbury,	170,407,000	162,377,000	123,002,000	116,086,000	30,547,507	30,358,441	15,057,433	15,057,433	9.30	9.56
Salem,	45,062,000	44,265,000	37,041,600	30,891,000	987,310	984,445	130,100	6,002,900	15.32	13.95
South Boston,	68,010,000	65,004,976	49,418,387	49,882,721	12,407,637	12,581,059	301,800	6,193,976	9.09	9.68
Spencer,	10,188,000	10,135,200	8,903,600	9,150,400	—	—	927,000	801,000	8.76	8.49
Springfield,	81,589,000	74,754,000	72,271,000	65,454,000	4,617,000	3,736,000	439,000	3,774,000	4.02	6.15
Taunton,	35,531,000	33,358,000	31,706,000	30,127,900	1,353,500	1,322,100	639,000	1,830,700	5.15	3.74
Waltham,	29,248,500	30,137,500	26,352,300	26,840,160	1,299,800	1,133,870	525,300	1,090,900	3.60	6.28
Ware,	4,676,110	5,001,760	7,408,100	8,425,000	12,666	214,600	83,900	408,244	10.65	9.36
Webster,	1,173,450	2,297,200	786,400	1,297,600	100,000	324,000	25,000	202,030	22.33	24.20
Westfield,	6,834,800	6,503,700	5,627,300	5,387,077	177,933	264,573	45,600	983,007	14.40	13.66
Woburn,	8,697,500	7,942,200	7,695,050	6,911,960	—	103,255	739,950	739,950	8.50	8.90
Worcester,	112,837,700	100,724,500	101,021,000	86,826,500	3,769,300	4,147,300	172,500	8,047,400	7.13	8.92

Oil Gas.

Anhkerst,	12	855,123	713,613	75,684	57,000	—	—	—	—
Chicopee Falls,	2,397,038	2,070,384	11,578,220	11,015,680	12	—	—	—	—
Garfield,	901,200	785,000	785,000	55,400	—	25,000	40,200	10.01	—
Great Barrington,	14,544,300	438,000	476,500	—	—	12	—	—	12.47
Ipswich,	12	1,328,000	1,062,370	5,000	—	—	—	—	—
Lee,	12	206,040	226,020	—	—	—	—	—	—
Leominster,	2,122,400	1,977,105	1,697,965	328,502	294,516	21,000	164,932	7.77	8.90
Lexington,	831,670	636,670	636,670	205,000	200,000	10,000	—	—	—
Middleborough,	650,000	1,007,053	616,266	865,033	—	2,500	31,000	15.47	12.31
Mutual (Southbridge),	1,413,000	1,512,550	1,292,050	1,222,100	18,250	—	198,700	14.00	16.71

¹ Sells gas to other companies only. ² Includes 501,000 feet of gas bought from Bay State Gas Company. ³ Includes 215,000 feet of gas bought from Bay State Gas Company. ⁴ Not returned. ⁵ Includes 21,388,000 feet of gas bought from Bay State Gas Company. ⁶ Includes 10,357,500 feet of gas bought from Bay State Gas Company. ⁷ Includes 2,223,000 feet of gas used in the mills of the company. ⁸ Includes 2,222,000 feet used in the mills of the company. ⁹ Figures for seven months only. ¹⁰ Includes 340,500 feet used in the mills of the company. ¹¹ Quantity of gas used in the mills of company not known. ¹² Quantities not given. ¹³ Began operations Feb. 1, 1888. ¹⁴ Gas bought. ¹⁵ Works in operation for nine months only.

The following table shows the greatest and least daily output of each of the companies, and the date of the same : —

NAME OF COMPANY.	Greatest Output.	Date.	Least Output.	Date.
Adams,	1 —	—	—	—
Amesbury,	33,500	Dec. 17,	5,800	June 17
Amherst,	1 —	—	—	—
Arlington,	35,500	Jan. 22,	7,950	July 15
Attleborough,	34,500	Jan. 29,	13,500	July 6
Beverly,	34,100	Dec. 21,	7,300	July 15
Bay State (Boston),	306,000	June 20,	1 —	—
Boston,	6,260,669	Dec. 18,	1,006,062	July 15
Brookton,	80,036	Oct. 26,	12,572	July 4
Brookline,	240,800	Dec. 24,	80,700	July 29
Cambridge,	566,000	Dec. 11,	111,000	July 4
Charlestown,	371,000	Dec. 24,	117,000	June 30
Chelsea,	172,000	Dec. 12,	42,000	June 9
Chicopee,	57,700	Jan. 5,	4,900	Aug. 17
Chicopee Falls,	2 —	—	—	—
Citizens' (Quincy),	41,000	Dec. 30,	8,900	July 8
Citizens' (Wakefield),	30,821	Dec. 20,	8,179	Aug. 11
Clinton,	51,500	Jan. 2,	7,500	July 8
Danvers,	8,833	Jan. 21,	1,922	July 29
Dedham,	44,900	Jan. 2,	9,730	July 30
Dorchester,	276,600	Dec. 18,	94,000	July 4
East Boston,	175,270	Dec. 23,	50,000	July 15
Easthampton,	38,800	Dec. 18,	3,000	July 7
Fall River,	355,000	Dec. 11,	52,000	July 22
Fitchburg,	90,300	Dec. 24,	15,900	Aug. 5
Gardner,	7,200	Dec. 24,	1,100	June 27
Gloucester,	80,000	Nov. 13,	14,000	June 9
Great Barrington,	1 —	—	—	—
Greenfield,	21,200	Nov. 12,	1,600	July 4
Haverhill,	252,000	Dec. 17,	46,000	Aug. 19
Holyoke,	268,767	Dec. 17,	50,923	July 22
Ipswich,	1 —	—	—	—
Jamaica Plain,	149,536	Dec. 18,	51,318	July 24
Lawrence,	409,250	Dec. 27,	51,194	July 29
Lee,	1 —	—	—	—
Leominster,	1 —	—	—	—
Lexington,	1 —	—	—	—
Lowell,	1,242,000	Dec. 18,	209,000	June 9
Lynn,	341,200	Dec. 18,	56,500	July 8
Malden,	145,600	Dec. 21,	32,700	June 18
Manufacturers' (Fall River),	122,100	Dec. 12,	10,900	June 10
Marblehead,	22,000	Dec. 19,	3,500	May 12
Marlborough,	32,190	Dec. 19,	3,080	Aug. 6
Middleborough,	5,000	Dec. 24,	1,400	April 4
Milford,	51,440	Dec. 3,	9,310	July 4
Miller's River (Athol),	22,000	Dec. —	1,600	June —
Mutual (Southbridge),	1 —	—	—	—
Nantucket,	13,950	Aug. 31,	2,710	April 13
Natick,	22,600	Jan. 1,	3,700	Aug. 1
New Bedford,	225,500	Dec. 18,	64,400	Aug. 17

¹ Not returned.² No station meter.

NAME OF COMPANY.	Greatest Output.	Date.	Least Output.	Date.
Newburyport,	65,650	Dec. 11,	16,400	July 15
Newton,	223,000	Jan. 22,	68,000	July 21
North Adams,	93,500	Dec. 19,	18,600	July 23
Northampton,	61,688	Dec. 17,	5,902	July 12
North Attleborough,	86,393	Dec. 4,	8,483	June 9
Norwood,	1—	—	—	—
Pittsfield,	68,000	Dec. 23,	18,000	July 3
Plymouth,	21,300	Dec. 31,	5,090	May 30
Roxbury,	748,000	Dec. 18,	182,064	July 29
Salem,	203,000	Nov. 29,	62,000	May 25
South Boston,	304,658	Dec. 24,	85,690	July 24
Spencer,	42,200	Oct. 31,	14,100	Aug. 15
Springfield,	406,000	Dec. 19,	83,000	July 23
Taunton,	225,000	Dec. 28,	55,000	June 16
Waltham,	175,000	Nov. 25,	18,900	July 4
Ware,	30,130	Jan. 3,	4,450	June 9
Webster,	1—	—	—	—
Westfield,	34,800	Dec. 18,	7,000	Aug. 6
Woburn,	44,600	Dec. 11,	11,300	July 4
Worcester,	568,000	Nov. 29,	106,000	June 29

¹ Not returned.

The following tables show the total quantity of gas sold during the year ending June 30, 1889; the percentage of increase in sales over the previous year; the capital (including bonds) per thousand feet sold; the average price received for all gas sold during the year ending June 30, 1889; and the average price received the year previous:—

Coal-gas Companies.

[Boldface figures show decrease.]

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1887-88. Per Cent.	Capital per M sold, including Bonds.	Average Price received per M sold, 1888-89.	Average Price received per M sold, 1887-88.
	Feet.				
Adams,	5,533,714	6.64	\$3 126	\$2 35	\$2 35
Amesbury,	3,812,600	0.66	15 737	1 91	1 98
Arlington,	5,478,084	2.91	12 778	2 76	2 69
Attleborough,	5,901,575	1.60	8 116	2 00	2 25
Beverly,	5,542,900	12.24	¹ 12 232	2 41	2 57
Boston,	1,237,646,700	5.60	2 088	1 25	1 31
Brockton,	13,170,000	3.26	7 517	2 03	2 09
Brookline,	50,930,432	12 12	¹ 10 465	2 13	2 16
Cambridge,	110,018,902	4.28	6 362	1 68	1 68
Charlestown,	73,867,528	1.15	¹ 6 818	1 68	1 72
Chelsea,	31,561,702	2.72	¹ 10 445	1 95	2 10
Chicopee,	7,275,168	6.18	4 124	1 83	1 95
Citizens' (Quincy),	4,860,500	4.35	9 361	2 35	2 38
Citizens' (Wakefield),	4,329,443	6 74	22 063	2 44	3 32
Clinton,	6,515,020	1.91	¹ 7 674	2 19	2 15
Danvers,	1,163,100	4 40	18 915	2 87	3 20
Dedham,	6,433,700	7.58	16 942	2 45	2 67
Dorchester,	56,206,171	12.81	7 116	2 02	2 14
East Boston,	34,642,924	4.37	6 351	1 71	1 76
Easthampton,	3,761,200	20.45	7 976	2 51	2 50
Fall River,	46,863,576	7.55	6 145	1 57	1 57
Fitchburg,	15,443,500	2.50	3 885	1 80	1 86
Gloucester,	12,479,370	13.88	4 992	1 80	1 80
Greenfield,	2,891,500	1.30	17 292	2 37	2 39
Haverhill,	43,673,700	5.32	2 575	1 48	1 51
Holyoke,	41,924,000	2.65	—	1 60	1 74
Jamaica Plain,	31,229,652	13.71	7 445	1 94	2 12
Lawrence,	67,096,185	6.66	¹ 7 303	1 44	1 43
Lowell,	200,039,900	8 91	2 499	1 10	1 19
Lynn,	55,332,000	14 30	¹ 6 777	1 77	1 79
Malden,	27,653,500	1.20	7 957	1 96	1 99
Manufacturers' (Fall River),	12,180,900	5.12	4 105	1 54	1 54
Marblehead,	3,137,870	10.84	13 703	2 68	2 76
Marlborough,	4,327,170	10 53	11 554	2 13	2 44
Milford,	8,484,526	0.40	9 429	1 97	1 97
Miller's River (Athol),	2,459,700	3.57	¹ 30 898	2 31	2 45

¹ Capital invested in electric-light plant included.

Coal-gas Companies — Concluded.

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1887-88, per Cent.	Capital per M sold, including Bonds.	Average Price received per M sold, 1888-89.	Average Price received per M sold, 1887-88.
	Feet.				
Nantucket,	2,157,070	4.38	\$16 689	\$2 71	\$2 76
Natick,	3,426,300	14.86	8 318	2 24	2 55
New Bedford,	42,591,900	2.11	¹ 11 593	1 55	1 58
Newburyport,	9,877,800	5.38	8 099	1 98	2 00
Newton,	44,435,400	10.41	4 501	1 95	2 03
North Adams,	16,820,400	15.20	3 508	1 82	1 83
Northampton,	10,071,100	6.57	4 965	1 91	1 98
North Attleborough, . .	11,311,800	4.40	12 040	2 01	2 23
Norwood,	1,968,600	52.32	6 096	2 36	2 47
Pittsfield,	12,822,480	4.21	4 874	1 96	1 99
Plymouth,	4,127,140	10.52	9 692	2 19	2 23
Roxbury,	154,449,567	5.47	3 885	1 59	1 71
Salem,	38,028,910	0.41	7 889	1 80	1 80
South Boston,	61,826,024	5.75	7 812	1 72	1 75
Spencer,	8,903,600	2.70	¹ 19 226	1 21	1 25
Springfield,	76,888,000	11.15	7 478	1 67	1 72
Taunton,	33,041,300	5.06	2 421	1 53	1 59
Waltham,	27,653,100	1.15	¹ 5 786	1 81	1 81
Ware,	1,870,366	7.13	—	2 38	² 2 54
Webster,	³ 886,400	—	—	2 32	2 57
Westfield,	5,805,233	2.72	¹ 13 780	2 26	2 34
Woburn,	7,695,050	9.69	5 861	1 94	1 99
Worcester,	104,790,300	14.24	4 962	1 50	1 50

Oil-gas Companies.

Amherst,	910,807	27.63	\$12 077	\$5 46	\$5 36
Chicopee Falls,	578,230	6.08	—	² 3 57	² 3 63
Gardner,	785,000	⁴ —	54 140	4 50	5 61
Ipswich,	1,333,000	25.59	18 892	2 90	3 05
Lee,	260,400	10.33	—	7 50	7 50
Leominster,	1,936,468	9.03	25 820	4 31	4 81
Lexington,	841,670	13.88	25 719	4 93	5 26
Middleborough,	⁵ —	—	—	5 40	—
Mutual (Southbridge), .	1,220,300	3.14	12 292	3 00	3 00

¹ Capital invested in electric-light plant included.² Average price for gas sold to the public.³ For seven months only.⁴ Works in operation last year for five months only.⁵ Return covers nine months only.

The following tables show the capital (including bonds), the gas sold, the gas unaccounted for, and the number of consumers per mile of main; also the gas sold per consumer and per meter light:—

Coal-gas Companies.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unaccounted for.	Number of Consumers.		
		Feet.	Feet.		Feet.	Feet.
Adams,	\$3,460	1,106,743	174,257	26.4	37,177	3,862
Amesbury,	9,772	620,944	124,103	22.3	26,734	3,321
Arlington,	3,196	250,141	64,488	17.6	14,229	2,392
Attleborough,	12,739	1,569,568	252,480	54.5	28,788	5,637
Beverly,	19,576	782,894	111,151	54.9	13,355	3,339
Boston,	19,144	9,167,985	663,033	229.4	38,195	3,796
Brockton,	7,857	1,021,445	180,412	52.9	19,745	3,067
Brookline,	19,509	908,656	112,308	29.2	22,895	3,298
Cambridge,	8,644	1,358,593	112,118	63.9	19,205	3,536
Charlestown,	12,922	1,890,925	293,936	96.1	16,062	3,313
Chelsea,	17,416	709,252	139,694	34.2	18,241	3,774
Chicopee,	8,571	2,083,411	436,252	51.4	40,292	3,442
Citizens' (Quincy),	3,620	386,675	117,430	26.9	12,678	2,540
Citizens' (Wakefield),	4,765	216,472	78,590	16.5	11,883	1,551
Clinton,	11,211	1,460,767	416,475	46.9	31,005	1,775
Danvers,	7,719	408,105	189,825	40.3	10,113	1,434
Dedham,	8,610	508,190	122,545	23.5	19,536	2,694
Dorchester,	7,657	1,075,922	152,298	46.5	14,618	2,334
East Boston,	11,055	1,740,850	191,709	69.1	17,035	4,330
Easthampton,	3,241	1,210,900	161,121	48.2	20,777	1,840
Fall River,	14,575	2,371,640	332,643	55.4	39,331	2,997
Fitchburg,	5,254	1,352,321	101,952	50.4	25,467	3,433
Gloucester,	10,950	2,193,206	236,314	103.9	19,757	4,352
Greenfield,	10,504	607,458	179,598	46.6	13,025	3,174
Haverhill,	6,940	2,694,245	142,770	113.2	27,641	4,067
Holyoke,	-	2,621,988	370,357	81.0	32,056	3,714
Jamaica Plain,	8,826	1,185,186	120,556	45.0	16,249	2,514
Lawrence,	16,832	2,304,919	226,946	76.2	30,237	4,514
Lowell,	7,122	2,849,571	167,717	99.9	27,438	3,595
Lynn,	13,827	2,046,265	319,937	79.5	24,538	4,294
Malden,	4,094	514,580	46,727	29.7	16,982	2,943
Manufacturers' (Fall River),	11,111	2,706,872	282,421	58.2	42,797	2,130
Marblehead,	10,831	790,396	125,473	47.3	14,297	2,074
Marlborough,	18,315	1,584,044	336,960	59.3	26,293	2,862
Milford,	11,611	1,341,383	100,363	61.1	19,222	2,922
Miller's River (Athol),	23,457	759,184	81,790	41.0	18,118	2,711
Nantucket,	7,438	446,703	59,194	34.4	10,689	2,331
Natick,	7,744	931,060	46,467	56.0	15,225	1,887
New Bedford,	17,332	1,494,977	128,238	85.9	14,760	2,943
Newburyport,	8,938	1,103,665	144,772	50.4	21,902	3,723
Newton,	3,344	742,943	76,821	33.2	19,378	3,174
North Adams,	5,978	1,704,194	291,327	50.9	29,104	4,011
Northampton,	5,531	1,114,060	95,343	44.9	24,806	3,281
North Attleborough,	15,252	1,266,703	122,506	40.1	31,597	4,371
Norwood,	2,844	466,493	-	9.5	49,215	3,264
Pittsfield,	7,872	1,614,922	237,622	77.3	19,395	4,066
Plymouth,	11,142	1,149,621	14,785	64.9	16,323	2,585
Roxbury,	8,511	2,190,775	226,346	93.7	18,744	3,525
Salem,	11,669	1,479,150	268,494	89.3	16,140	3,316
South Boston,	16,941	2,168,573	216,905	78.5	22,091	4,325
Spencer,	14,040	735,834	73,636	35.9	20,515	4,352
Springfield,	14,545	1,945,050	95,313	80.7	22,648	3,716
Taunton,	4,338	1,791,827	99,278	62.8	27,380	3,462

¹ Includes capital invested in electric-light plant.

Coal-gas Companies — Concluded.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas un- accounted for.	Number of Consumers.		
		Feet.	Feet.		Feet.	Feet.
Waltham,	\$9,938	1,717,522	64,940	51.2	31,943	4,721
Ware,		1,827,237	224,434	61.3	30,470	2,672
Webster, ²	19,084	—	—	32.1	—	—
Westfield,	15,325	1,112,114	188,500	58.6	18,389	3,300
Woburn,	9,202	1,247,182	119,928	64.8	19,237	3,340
Worcester,	12,482	2,515,370	193,170	99.8	24,295	5,231

Oil-gas Companies.

Amherst,	\$2,638	218,420	—	29.2	6,845	1,651
Chicopee Falls,	—	550,070	—	60.9	9,036	2,303
Gardner,	4,686	86,549	9,949	10.9	7,929	2,023
Ipswich,	8,867	469,366	—	33.5	13,979	1,123
Lee,	—	197,273	—	53.0	3,720	1,157
Leominster,	7,143	276,638	23,561	29.7	7,731	1,564
Lexington,	7,569	294,290	—	34.9	6,367	1,645
Middleborough,	8,351	—	—	35.2	—	—
Mutual (Southbridge),	7,281	592,378	96,456	86.4	6,753	1,396

¹ Includes capital invested in electric-light plant.² Return for seven months only.³ Return for nine months only.

The following table shows the number of tons of coal carbonized in 1888-89 and 1887-88, the kind and quantities of enricher used by the various coal-gas companies, and the percentage of cost of coal received from residuals:—

NAME OF COMPANY.	Number of Tons of Coal carbon- ized, Year ending June 30, 1889.	Number of Tons of Coal carbon- ized, Year ending June 30, 1888.	Enrichers used.	Cannel. Tons.	Naphtha. Gallons.	Residuum. Barrels.	Oil. Gallons.	Percentage of Cost of Coal received from Residual Products.
Adams, .	681	707	Cannel coal,	34	—	—	—	25.12
Arlington, .	637	657	Oil, .	—	—	—	993	18.73
Atteborough, .	767	791	—	—	—	—	—	25.51
Beverly, .	620	706	—	—	—	40	—	25.28
Boston, .	110,118	106,395½	Residuum, .	—	787,284	—	—	35.82
Brookton, .	1,436	1,412½	Cannel, albertite, naphtha,	—	—	—	—	37.56
Brookline, .	5,091¼	4,709½	Residuum, .	641	—	139	—	30.87
Cambridge, .	10,277	10,147	Cannel, gas oil, .	172½	—	—	7,689	32.09
Charlestown, .	7,392	7,394	Oil, .	—	—	—	51,489	46.61
Chelsea, .	3,886	3,989	Naphtha, .	—	145,983	—	—	43.11
Chilcopee, .	775	900	Gas oil, .	—	—	—	9,735	21.41
Clifton, .	631	604¼	Cannel, .	73	—	—	—	27.24
Clitzens' (Quincy), .	708	759	Crude petroleum, .	—	—	—	—	5.69
Clitzens' (Wakefield), .	842½	853	—	21	—	—	2,988	30.82
Clinton, .	181½	184	Cannel, oil, .	—	—	6	—	11.23
Danvers, .	769	745½	Residuum, .	—	—	33	—	19.87
Deatham, .	5,691½	5,379½	Residuum, .	—	—	—	1,860	26.80
Dorchester, .	3,920	3,832	Cannel, gas oil, .	217½	—	—	588	33.98
East Boston, .	443½	429	Naphtha, oil, .	4	148	—	—	6.21
Easthampton, .	2,302	4,213	Cannel, naphtha, .	—	—	—	—	25.10
Fall River, .	1,421	1,332	Naphtha, .	100	—	—	—	40.08
Fitchburg, .	1,252	1,113	Cannel, .	26	—	—	6,414	35.22
Gloucester, .	4,659	4,322	Cannel, gas oil, .	—	—	22	—	38.11
Greenfield, .	4,170	4,017½	Residuum, .	—	—	—	—	37.41
Haverhill, .	3,250	3,008	Cannel, .	360	—	—	22,979	30.92
Holyoke, .	6,370	7,090	Crude petroleum, .	—	—	—	—	37.05
Jamaica Plain, .	18,223	17,450	Cannel, oil, .	101	—	—	3,055	51.78
Lawrence, .	5,396	4,908	Cannel, gas oil, .	218	—	—	—	52.97
Lowell, .	2,667	3,049	Naphtha, .	—	91,489	—	—	40.09
Lynn, .	1,982	1,968½	Oil, .	—	—	—	—	27.59
Malden, .	—	—	Cannel, .	—	—	—	10,718	27.40
Manufacturers' (Fall River), .	—	—	—	129	—	—	—	—

The following tables show the materials and quantity of each used in the manufacture of water and oil gas, also the process used and the quantity of water gas made : —

Water Gas.

NAME OF COMPANY.	Process used.	Materials used in Generator.	Quantity used. Tons.	Enricher used.	Quantity used. Gallons.	Gas made. Feet.
Amesbury, .	Granger, .	Coal, . . .	¹ 284	Naphtha, .	24,100	4,604,592
Bay State, .	Flannery, .	Anthracite, . .	² 486½	{ Naphtha, .	115,951	23,566,000
Charlestown, .	Granger, .	Coke, . . .	³ -	{ Crude oil, .	1,592	
Fall River, .	Lowe, .	Hard white-ash coal, . . .	⁴ 328½	Naphtha, .	45,883	6,540,400
Lynn, . .	Granger, .	Coke, . . .	⁵ -	Petroleum, .	72,141	13,604,200
Miller's River (Athol), .	Granger, .	Lehigh coal, . .	⁶ 87	{ Naphtha, .	5,945	3,693,000
Spencer, . .	Evans, .	Coke, . . .	⁷ -	{ Lima oil, .	17,312	
Worcester, .	Granger, .	Coke, . . .	⁸ -	Naphtha, .	11,300	2,800,000
				Petroleum, .	6,700	1,500,000
				Naphtha, .	118,130	19,388,000

¹ 85 tons of coal used for generating steam.

² 510½ tons of coal used for generating steam.

³ 250½ chaldrons used in generator, 888 chaldrons used for steam.

⁴ 90 tons of coke and 55 tons of screenings and slack used for generating steam.

⁵ From 1 to 1½ bushels per M used in generator. Coke used for steam, quantity not given.

⁶ 27½ tons of Lehigh coal used for generating steam.

⁷ Quantities used not given.

⁸ 14,500 bushels of coke used in generator, and about one-sixth of a bushel per M used for steam.

Oil Gas.

NAME OF COMPANY.	Materials used.	Quantity used. Gallons.	Fuel used.	Quantity used.
Amherst,	Naphtha, .	13,885	Coke, . . .	3,280 bush.
Chicopee Falls,	Petroleum, .	24,455	Anthracite, . .	73 tons.
Gardner,	Naphtha, .	14,800	Wood, . . .	96 cords.
Ipswich,	Naphtha, .	13,747	Coal, . . .	63 tons.
Lee,	Petroleum, .	5,667	Coke, . . .	33½ tons.
Leominster,	Petroleum, .	22,517	Cumberland coal, .	106½ tons.
Lexington,	Petroleum, .	10,392	Anthracite, . .	67 tons.
Middleborough,	Naphtha, .	¹ 1,230	Wood, . . .	62 cords.
Mutual (Southbridge),	Petroleum, .	15,439	Anthracite, ² .	44 tons.

¹ For nine months only.

² Two and one-half cords of wood used.

STREET MAINS.

As noted in previous reports, several companies still estimate the lengths of their street mains. A knowledge of the size of mains in each street in the territory covered by them would seem to be of advantage to the companies themselves. Adequate pressure throughout an extended system of mains is almost wholly dependent on the size of the mains, and a sufficient supply of gas can be obtained when extensions are projected only by a thorough knowledge of the sizes and lengths of each size of the mains lying between the works and district proposed to be supplied.

During the year the companies in the State laid about fifty-four miles of mains, the increase being distributed among fifty-two companies, and varying in the several cases from about one hundred feet to nearly six miles.

The following table shows the lengths and sizes of the mains, as returned by the companies : —

NAME OF COMPANY.	DIAMETER, IN INCHES.															Total Length in Feet.	LENGTH IN MILES AND FEET.		Increase during Year.
	1	1 1/4	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	20	24		Miles.	Feet.	
Adams,	-	-	-	5,280	-	10,560	2,640	7,920	-	-	-	-	-	-	-	-	5	-	
Amesbury,	-	-	300	4,500	-	13,850	10,500	3,000	200	100	-	-	-	-	-	-	6	770	
Amherst,	223	185	2,409	9,567	-	9,681	-	9,681	-	-	-	-	-	-	-	-	4	945	
Arlington,	-	-	179	500	-	99,019	2,000	13,985	-	-	-	-	-	-	-	-	115,683	7,383	
Attleborough,	-	100	-	2,000	-	3,091	9,595	4,640	455	-	-	-	-	-	-	-	21	4,893	
Bay State,	-	-	-	-	-	15,940	13,373	26,949	-	6,553	7,550	-	-	-	-	-	3	4,041	
Beverly,	-	-	-	14,455	-	35,051	10,352	12,190	2,400	-	-	-	-	-	-	-	15	3,070	
Boston,	-	-	2,381	2,381	-	181,588	108,849	228,728	22,243	27,972	68,112	-	-	-	-	-	17	4,835	
Brookline,	11	2,658	649	3,106	-	35,051	10,352	12,190	2,400	100	-	-	-	-	-	-	7	435	
Cambridge,	7,171	12,460	5,412	5,260	-	123,171	72,421	38,744	22,545	8,750	1,120	900	-	-	-	-	130	3,165	
Charlestown,	-	3,396	-	-	-	132,501	27,264	16,820	5,773	2,584	5,531	301	-	-	-	-	12	3,157	
Chelsea,	-	-	200	5,480	-	95,240	53,880	26,400	52,800	1,000	-	-	-	-	-	-	56	264	
Chicopee,	-	2,640	-	5,280	-	5,280	2,640	2,640	-	-	-	-	-	-	-	-	80	5,212	
Chicopee Falls,	-	1,600	-	-	-	2,500	1,500	-	-	-	-	-	-	-	-	-	39	933	
Citizens' (Quincy),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	2,680	
Citizens' (Wakefield),	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2,640	
Clinton,	-	-	850	-	-	-	-	-	-	-	-	-	-	-	-	-	1	320	
Cottage City,	-	-	-	850	-	7,675	6,450	5,500	-	1,250	-	-	100	-	-	-	8	66,400	
Danvers,	-	-	-	-	-	2,252	5,665	2,013	975	-	-	-	-	-	-	-	4	2,455	
Dedham,	-	-	3,418	-	-	7,226	3,750	657	-	-	-	-	-	-	-	-	2	345	
Dorchester,	-	3,600	6,932	-	-	29,085	8,583	18,681	-	-	-	-	-	-	-	-	12	4,491	
East Boston,	2,959	4,522	2,100	2,100	-	138,759	82,825	28,686	7,800	8,100	-	-	75	-	-	-	12	3,521	
Easthampton,	-	-	2,400	2,400	-	50,070	36,984	4,400	5,400	950	4,900	-	-	-	-	-	52	1,266	
Fall River,	600	-	840	-	-	2,500	7,160	500	-	-	-	-	-	-	-	-	19	4,784	
Fitchburg,	-	664	812	8,490	-	30,028	4,389	42,588	22,190	1,500	-	-	2,200	-	-	-	3	3,410	
Gardner,	-	-	-	4,000	-	41,100	4,600	5,400	5,000	200	-	-	-	-	-	-	19	4,051	
Gloucester,	700	-	750	18,890	-	11,700	6,250	-	-	-	-	-	-	-	-	-	11	2,220	
Great Barrington,	-	-	-	-	-	20,041	6,700	1,200	1,400	-	-	-	-	-	-	-	5	3,691	
Greenfield,	-	-	1,320	2,640	-	3,960	1,320	2,640	200	-	-	-	-	-	-	-	1	2,640	
Haverhill,	-	-	-	5,950	-	13,421	1,320	2,640	-	-	-	-	-	-	-	-	4	1,131	
Holyoke,	-	-	-	7,220	-	48,323	4,800	18,657	-	4,025	5,825	-	2,490	97	-	-	16	1,132	
Ipswich,	-	-	-	4,190	-	43,838	10,678	12,564	5,150	-	-	-	-	-	-	-	15	5,235	
Jamaica Plain,	2,100	-	300	10,650	-	950	-	1,000	-	-	-	-	-	-	-	-	2	4,440	
Lawrence,	-	-	975	7,125	-	75,561	29,112	14,187	10,575	591	-	-	-	-	-	-	26	1,848	
Lee,	-	-	-	2,000	-	96,969	11,098	23,722	8,112	2,628	9,163	-	1,562	432	-	-	29	586	
Lexington,	-	-	-	-	-	1,000	4,000	-	-	-	-	-	-	-	-	-	1	1,720	
Lexington,	1,200	1,000	2,810	7,000	-	1,114	1,500	500	-	-	-	-	-	-	-	-	4	36,900	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4,564	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,000	

Gloucester,	491	76	5	5	5	5	7	134	232	476	2	151	2	123	47	52	1	5	591	
Great Barrington,	40	18	2	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	63	
Greenfield,	23	160	19	16	16	16	15	15	5	8	1	1	1	6	1	1	1	1	222	
Haverhill,	102	1,399	131	95	57	22	16	16	5	3	8	5	1	6	1	1	1	1	1,835	
Holyoke,	5	64	54	30	21	21	4	4	5	3	3	1	1	1	1	1	1	1	1,295	
Ipswich,	3	28	29	6	6	6	8	8	2	2	26	7	7	2	2	2	2	2	95	
Jamaica Plain,	16	555	371	199	28	35	14	14	14	14	14	14	14	14	14	14	14	14	1,185	
Lawrence,	729	1,079	210	62	34	35	5	5	5	5	5	5	5	5	5	5	5	5	2,219	
Lee,	25	20	20	6	6	6	1	1	1	1	1	1	1	1	1	1	1	1	70	
Lexington,	2	163	21	7	9	9	1	1	1	1	1	1	1	1	1	1	1	1	208	
Lowell,	89	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100	
Lynn,	961	4,396	839	316	122	98	151	151	2	33	78	35	35	12	12	12	12	12	7,013	
Malden,	4	1,659	261	115	60	16	18	18	3	18	3	18	18	1	1	1	1	1	2,156	
Manufacturers' (Fall River),	35	1,015	411	71	28	10	14	14	4	5	5	1	1	3	4	3	3	3	1,596	
Marblehead,	—	210	21	13	1	1	—	—	—	—	—	1	1	3	4	3	3	3	262	
Marlborough,	—	137	25	16	20	5	2	2	6	6	2	—	—	—	—	—	—	—	188	
Middleborough,	6	87	21	16	20	5	6	6	—	—	1	—	—	—	—	—	—	—	162	
Milford,	1	105	20	2	—	—	2	2	—	—	7	—	—	—	—	—	—	—	130	
Miller's River (Athol),	22	318	28	25	15	—	4	4	2	1	—	—	—	—	—	—	—	—	422	
Mutual (Southbridge),	—	68	33	24	4	—	—	—	—	—	—	—	—	—	—	—	—	—	133	
Natick,	18	95	40	18	6	6	—	—	—	—	—	—	—	—	—	—	—	—	178	
Naticket,	—	135	6	5	4	4	—	—	—	—	—	—	—	—	—	—	—	—	157	
Natick,	3	112	46	23	10	12	8	8	3	1	—	—	—	—	—	—	—	—	206	
New Bedford,	24	1,728	515	135	14	12	4	4	1	11	—	—	—	1	1	3	3	3	2,448	
Newburyport,	29	340	41	18	14	2	—	—	2	3	—	—	—	1	1	1	1	1	451	
Newton,	56	995	659	182	54	20	12	12	1	3	2	2	2	2	2	2	2	2	1,889	
North Adams,	—	401	51	16	7	3	11	11	4	2	3	2	2	2	2	2	2	2	502	
Northampton,	—	293	76	9	7	9	—	—	3	5	5	2	2	—	—	—	—	—	406	
North Attleborough,	—	206	74	42	12	18	—	—	4	—	2	2	2	—	—	—	—	—	358	
Norwood,	16	7	6	2	4	2	4	4	—	—	1	—	—	—	—	—	—	—	40	
Pittsfield,	—	513	51	29	12	2	3	3	1	—	—	2	2	—	—	—	—	—	614	
Plymouth,	68	135	8	7	8	—	—	—	—	—	—	—	—	1	1	1	1	1	253	
Roxbury,	71	3,494	2,109	754	108	25	3	25	2	10	6	—	—	1	1	1	1	1	6,610	
Salem,	126	1,630	519	66	38	26	13	13	2	3	4	—	—	1	1	1	1	1	2,295	
South Boston,	—	367	43	9	5	2	—	—	1	1	9	—	—	1	1	1	1	1	2,257	
Spencer,	—	2,332	517	156	93	3	—	—	1	0	2	36	—	1	1	1	1	1	434	
Springfield,	1	2,332	517	156	93	3	—	—	1	7	3	5	8	2	2	2	2	2	3,191	
Taunton,	44	687	237	92	32	25	—	—	1	3	8	—	—	5	5	5	5	5	1,158	
Waltham,	182	521	61	22	14	5	1	1	6	1	2	3	3	2	2	2	2	2	825	
Ware,	9	71	29	14	4	—	—	—	—	—	—	—	—	—	—	—	—	—	136	
Webster,	4	103	11	7	—	—	—	—	—	—	3	—	—	—	—	—	—	—	126	
Wendell,	18	225	33	7	8	—	—	—	—	—	—	—	—	—	—	—	—	—	596	
Westfield,	—	18	225	33	7	—	—	—	—	—	—	—	—	—	—	—	—	—	126	
Woburn,	58	216	30	18	11	6	4	4	—	—	1	—	—	—	—	—	—	—	306	
Worcester,	824	2,633	309	158	82	22	2	41	4	9	11	—	—	2	2	2	2	2	400	
Totals,	55,979	20,098	11,372	4,061	1,801	2	7	151	913	134	232	476	2	151	2	123	47	52	1	100,714

HIGH-POWER GAS LAMPS.

The following table shows the number of Lungren or other high-power gas lamps in use June 30, 1889 : —

Adams,	35	Malden,	182
Beverly,	13	Manufacturers' (Fall River), . .	5
Brockton,	50	Marblehead { Lungren,	1
Brookline,	2	{ Albo-carbon,	50
Cambridge,	141	Miller's River (Athol),	6
Chelsea,	24	Natick,	28
Citizens' (Quincy),	3	New Bedford,	10
Clinton,	13	Newburyport,	6
Dedham,	4	Newton,	93
Dorchester,	6	North Adams,	130
East Boston,	66	Northampton,	22
Fall River,	33	North Attleborough,	60
Fitchburg,	7	Pittsfield,	9
Gloucester { Lungren,	6	Plymouth,	88
{ Albo-carbon,	150	Salem,	7
Greenfield,	21	South Boston,	9
Haverhill,	112	Springfield,	27
Jamaica Plain,	2	Taunton,	60
Lawrence,	225	Waltham,	35
Leominster,	2	Westfield,	20
Lowell,	40	Woburn,	12
Lynn,	17	Worcester,	12

GAS STOVES.

The number of gas stoves in use remains with most companies very small. If the companies were to aid the consumers, either by a reduction in the price of day gas or by furnishing stoves at a rental or by selling them at cost, it is probable that much could be done towards increasing the output of day gas, especially in summer.

An increased output of gas in summer would utilize the manufacturing plant to greater advantage, reducing the capital charge on that account, would not require any increase of distribution plant, and would only slightly increase distribution and management expenses; taxes would not be increased, and the greater yearly output would tend to reduce the cost of production per thousand feet, by the distribution of many expenses over this larger amount of gas.

The companies reporting more than one hundred stoves in use on June 30, 1889, are as follows:—

Fall River,	102	Spencer,	356
Gloucester,	115	Springfield,	about 1,500
Holyoke,	about 275	Taunton,	111
Lawrence,	about 250	Waltham,	162
Lowell,	about 2,000	Worcester,	about 800
New Bedford,	657		

Twenty-five companies report 48 gas engines in use, the largest number reported from any one place being 7, at Lynn.

PUBLIC LAMPS.

The number of public gas lamps supplied by the companies continues to diminish in about the same ratio as noted in the last report.

The net loss to the coal-gas companies was 999; or, omitting Cottage City, from which company no return was received, the loss was 988.

The loss to the oil-gas companies was relatively much greater, the company at Leominster losing 110 lamps; and the net loss to the several companies was 76, or more than one-third of all the lamps furnished by them.

The following table shows the number of lamps supplied June 30, 1889, the net increase, or decrease, during the year, the average price per thousand feet received from gas used for street lamps, and also the cost per thousand of the care of the lamps when this is done by the companies.

PUBLIC LAMPS. — *Coal Gas.*

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average Price received per M, including Expenses.	Expense of Lighting and Care of Lamps per M.
		Increase.	Decrease.		
Adams,	64	1	—	\$2 0480	—
Amesbury,	11	1	—	1 7600	\$0 4040
Arlington,	—	—	60	—	—
Beverly,	47	—	5	2 3223	0582
Boston,	3,028	—	526	1 0000	—
Brookline,	820	14	—	1 9981	2030
Cambridge,	862	—	91	1 4030	—
Charlestown,	918	—	35	1 5512	—
Chelsea,	511	—	19	1 8350	—
Chicopee,	4	—	2	2 0000	—

PUBLIC LAMPS. — *Coal Gas* — Concluded.

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average Price received per M, including Expenses.	Expense of Lighting and Care of Lamps per M.
		Increase.	Decrease.		
Citizens' (Quincy),	52	—	77	\$1 6585	\$0 5911
Citizens' (Wakefield), . . .	85	—	—	1 8197	—
Clinton,	6	—	—	2 3751	—
Dedham,	109	1	—	2 2502	—
Dorchester,	1,304	35	—	1 8039	—
East Boston,	690	—	32	1 6170	—
Easthampton,	—	—	56	2 4000	—
Fall River,	328	—	32	1 4925	—
Fitchburg,	62	—	4	1 5921	—
Gloucester,	100	1	—	1 6905	—
Greenfield,	—	—	6	—	—
Haverhill,	232	4	—	1 3472	—
Holyoke,	76	2	—	1 5000	—
Jamaica Plain,	740	27	—	1 8581	—
Lowell,	943	109	—	1 1000	—
Lynn,	264	—	14	1 7738	—
Malden,	2	—	157	2 1954	5743
Manufacturers' (Fall River),	100	—	—	1 4999	—
Marblehead,	79	6	—	2 4000	8876
Marlborough,	8	—	3	2 4705	—
Milford,	—	—	39	1 8999	4998
Miller's River (Athol), . . .	—	—	54	—	—
Nantucket,	76	4	—	2 0712	5808
Natick,	29	12	—	1 0409	—
New Bedford,	479	22	—	1 4739	4001
Newton,	753	—	18	—	—
North Adams,	116	9	—	1 2695	2721
Pittsfield,	70	—	—	2 0000	5198
Plymouth,	43	—	—	2 4897	8006
Roxbury,	1,848	—	4	1 5002	—
Salem,	98	—	14	1 8000	0061
South Boston,	765	—	30	1 5003	—
Springfield,	484	13	—	1 3746	—
Taunton,	147	—	16	1 5661	—
Waltham,	176	—	2	3 3317	9540
Ware,	—	—	20	—	—
Webster,	—	—	40	—	—
Westfield,	—	—	16	—	—
Worcester,	557	—	57	1 5000	—
Total,	17,086	—	—	—	—

Oil Gas.

Amherst,	36	—	—	\$6 0000	—
Chicopee Falls,	18	—	—	—	—
Ipswich,	12	12	—	3 5000	—
Leominster,	—	—	110	5 6036	\$0 7094
Lexington,	87	2	—	4 0244	0446
Middleborough,	20	20	—	—	—
Mutual (Southbridge), . . .	1	—	—	3 0000	—
Total,	174	—	—	—	—

PURITY OF GAS.

The law provides that when the gas of any company is found on three consecutive inspections to give less light than fifteen standard English candles, or to contain more than twenty grains of sulphur or ten grains of ammonia per hundred cubic feet of gas, or more than ten per cent. of carbonic oxide or any sulphuretted hydrogen, a fine of one hundred dollars shall be paid by such company to the city or town supplied by it. (Pub. Stats., chap. 61, sect. 14.)

The following table shows the amount of impurities found on the given dates, and the whole number of inspections during the year, of the gas of the several companies therein named, as reported to this Board by the State Inspector of Gas:—

Kind of Impurities.	NAME OF COMPANY.	Amount of Impurity.	Date when found.	Total Number of Inspections during the Year.
Deficient candle-power.	Citizens' (Quincy),	14.6	June 20,	3
	Danvers,	14.2	Nov. 1,	2
	Easthampton,	14.6	May 26,	3
	Miller's River (Athol),	14.3	May 29,	2
Sulphur, grains per 100 cu. ft.	Boston,	22.9	Oct. 11,	52
Ammonia, grains per 100 cu. ft.	Boston,	10.8	May 7,	52
	"	16.4	May 17,	—
	Citizens' (Wakefield),	10.8	May 22,	2
	Gloucester,	27.9	Mar. 20,	4
	"	16.1	Dec. 12,	—
	Haverhill,	17.5	Mar. 22,	9
	"	14.5	Dec. 31,	—
	Lowell,	11.2	Dec. 21,	33
	Plymouth,	31.2	July 12,	2
	Roxbury,	14.8	Nov. 16,	25
	"	32.3	Dec. 11,	—
	"	16.9	Dec. 26,	—
	Salem,	10.5	Nov. 30,	8
Sulphuretted hydrogen.	South Boston,	11.7	June 13,	12
	"	11.9	Dec. 12,	—
	Adams,	Trace,	Nov. 14,	3
	Amesbury,	"	Dec. 13,	3
	Boston,	"	Dec. 17,	52
	Fall River,	"	Nov. 20,	2

Kind of Impurities.	NAME OF COMPANY.	Amount of Impurity.	Date when found.	Total Number of Inspections during the Year.
Carbonic oxide, per cent. by volume.	Amesbury,	29.96	Mar. 21,	3
	"	28.74	Oct. 31,	—
	"	23.93	Dec. 13,	—
	Cottage City,	16.24	Nov. 7,	2
	Dorchester,	12.37	Nov. 29,	10
	"	10.97	Dec. 20,	—
	Fall River,	21.09	Jan. 24,	9
	"	12.67	Mar. 13,	—
	"	21.90	Sept. 24,	—
	"	18.62	Nov. 20,	—
	Miller's River (Athol),	14.87	May 29,	2
	Roxbury,	14.50	May 18,	25
	"	18.73	Sept. 11,	—
	Spencer,	14.76	Apr. 16,	3
	"	13.51	Sept. 24,	—
	"	14.26	Dec. 5,	—

Of the inspections for ammonia, cited above, the two in Boston were consecutive.

Of those for carbonic oxide, the ones at Amesbury, Dorchester and Spencer were consecutive. At Fall River the first two were consecutive, and then after four inspections, when less than ten per cent. of carbonic oxide was found, the other two are again consecutive, followed by the last one of the year, again below ten per cent.

A comparison of the inspections made during the five years from 1885 to 1889, inclusive, shows the following results:—

	1885.	1886.	1887.	1888.	1889.
Number of inspections made,	517	426	445	458	451
Number of companies subject to inspection,	56	58	59	60	59
Number of companies showing deficiency in candle-power,	0	1	1	1	4
Highest candle-power, not including ten oil-gas companies,	26.0	24.0	23.3	21.6	22.1
Lowest candle-power, not including ten oil-gas companies,	15.1	14.7	12.5	13.3	14.2
Average candle-power, not including ten oil-gas companies,	17.62	17.76	17.74	17.60	17.59
Number of companies showing sulphuretted hydrogen,	3	4	4	1	4
Number of companies showing excess of sulphur,	0	2	4	1	1

	1885.	1886.	1887.	1888.	1889.
Number of companies showing excess of ammonia, . . .	6	15	9	13	9
Number of companies showing excess of carbonic oxide, . .	3	4	4	8	7
Largest amount of sulphur, . .	19.1	29.2	25.2	23.1	22.9
Smallest amount of sulphur, . .	2.8	2.5	1.4	3.2	1.5
Average amount of sulphur, . .	9.93	10.42	8.81	9.26	7.32
Largest amount of ammonia, . .	36.4	58.7	43.4	76.0	32.3
Smallest amount of ammonia, . .	1.—	1.—	1.—	1.—	1.—
Average amount of ammonia, . .	3.21	4.05	3.29	3.07	2.82

The inspections of the ten oil-gas companies showed :—

	1885.	1886.	1887.	1888.	1889.
Highest candle-power, . . .	61.3	58.6	59.7	52.4	55.0
Lowest candle-power, . . .	20.0	23.0	22 1	21 5	20.8
Average candle-power, . . .	30 60	30 35	30.36	33.73	34.72

ELECTRIC LIGHT.

The past year has been a very active one for those engaged in the electric lighting business. During the year forty-four new electric light and power companies have been incorporated, and four new companies for the manufacture of both gas and electric light. There are indications of further improvements in the processes and apparatus for generating electricity, and of still greater perfection in the construction of the lamps, thereby increasing their power of illumination and durability. Good reasons exist for believing that the cost of production has been reduced, and that the price of the light and power to consumers will be gradually lowered.

There is a feeling of doubt in the minds of the community, which is shared also by many engaged in the business, in relation to the candle-power of electric lights and the quantity of electricity actually used in operating them. Some more ready and convenient method of testing the candle-power is desirable; and also a means of measuring the quantity of electricity furnished to each consumer, which shall be inexpensive, accurate, and the operation of which can be easily observed and understood. Discoveries in this line are already numerous and valuable, but most of them are too costly, too complicated and obscure. This uncertainty, and the varying estimates of

cost, account in some measure for the wide range in price. Frequent inquiries have been made of the Board by town officers and others, in relation to the actual candle-power of the different electric lights in use. A few tests have been made, which were quite satisfactory, but they were expensive. It is anticipated that ere long electric light will be tested and measured with as much facility and accuracy as gas light.

There are some corporations organized to do electric business which, in the opinion of the commissioners, ought to be formally dissolved. This is especially true of those companies whose property and franchise have been purchased by gas companies under section 9, chapter 385 of the Acts of 1887. Authority to engage in electric lighting has in several instances been given to gas companies under the chapter cited, after and in consideration of the fact that they had executed an agreement to buy out existing electric companies. It is doubtful if those electric companies have the right again to engage in business.

The following list is given of electric light companies in this State, with the year of incorporation, location and capital.

With the exception of the companies in Hudson and Westborough, all these are incorporated under the laws of this Commonwealth. The two companies named are incorporated under the laws of Maine:—

NAME OF COMPANY.	When incorporated.	LOCATION.	CAPITAL.
Abington Electric Light and Power Co.,	1889	Abington, . . .	\$15,000
Abington and Rockland Electric Co., .	1889	Abington, . . .	25,000
Acton Electric Co.,	1889	Acton,	10,000
Adams Electric Light and Power Co., .	1887	Adams,	5,000
Agawam Electric Co.,	1889	Ipswich,	10,000
Andover Electric Co.,	1888	Andover,	20,000
Ayer Electric Co.,	1889	Ayer,	5,000
Beverly Gas Light Co.,	1888 ¹	Beverly,	—
Blackstone Electric Co.,	1889	Blackstone,	10,000
Blue Hill Electric Co.,	1889	Canton,	20,000
Boston Electric Light Co.,	1888	Boston,	1,000,000
Braintree Electric Co.,	1889	Braintree,	10,000
Bridgewater Electric Co.,	1889	Bridgewater,	15,000
Bristol County Electric Co.,	1889	Taunton,	20,000
Brookline Gas Light Co.,	1887 ¹	Brookline,	—
Cambridge Electric Light Co.,	1886	Cambridge,	200,000
Canton Electric Co.,	1889	Canton,	25,000
Charles River Electric Light and Power Co.,	1889	Boston,	5,000
Charlestown Gas Co.,	1886 ²	Boston (Charlestown), .	—

¹ Date of permission to engage in the business granted by the Board.

² Date of permission to engage in the business granted by the Legislature.

NAME OF COMPANY.	When incorporated.	LOCATION.	CAPITAL.
Chelsea Gas Light Co.,	1888 ¹	Chelsea,	—
Chicopee Electric Light Co.,	1887	Chicopee,	\$10,000
Clinton Gas Light Co.,	1887	Clinton,	—
Citizens' Electric Co.,	1888	Webster,	10,000
Concord Electric Co.,	1889	Concord,	20,000
Cottage City Gas and Electric Co.,	1889	Cottage City,	25,000
Danvers Electric Co.,	1889	Danvers,	10,000
Danvers Gas Light Co.,	1889 ¹	Danvers,	—
Dedham Electric Co.,	1888	Dedham,	25,000
Edison Electric Illuminating Co. of Boston,	1885	Boston,	500,000
Edison Electric Illuminating Co. of Brockton,	1883	Brockton,	71,000
Edison Electric Illuminating Co. of Fall River,	1883	Fall River,	81,600
Edison Electric Illuminating Co. of Lawrence,	1882	Lawrence,	65,000
Edison Electric Illuminating Co. of New Bedford,	1884	New Bedford,	100,000
Electric Light and Patent Flooring Co.,	1886	Amesbury,	35,600
Electric Light and Power Co. of Abington and Rockland,	1889	Abington,	40,000
Fall River Electric Light Co.,	1883	Fall River,	90,000
Fitchburg Gas Co.,	1889 ¹	Fitchburg,	—
Foxborough Electric Co.,	1889	Foxborough,	10,000
Framingham Electric Co.,	1888	Framingham,	80,000
Franklin Electric Light Co.,	1886	Turner's Falls,	5,000
Gardner Electric Co.,	1888	Gardner,	26,900
Gloucester Electric Co.,	1888	Gloucester,	20,000
Grafton and Upton Electric Co.,	1889	Grafton,	20,000
Great Barrington Electric Light Co.,	1888	Great Barrington,	16,000
Greenfield Electric Light and Power Co.,	1886	Greenfield,	15,000
Haverhill Electric Co.,	1888	Haverhill,	85,000
Holyoke Water Power Co.,	1888 ¹	Holyoke,	—
Hopkinton Electric Co.,	1889	Hopkinton,	10,000
Hudson Electric Light Co.,	1886	Hudson,	6,025
Hyde Park Electric Co.,	1888	Hyde Park,	25,000
Lawrence Gas Co.,	1887 ¹	Lawrence,	—
Leicester Electric Co.,	1887	Leicester,	4,000
Leominster Electric Light and Power Co.,	1888	Leominster,	30,000
Lowell Electric Light Corporation,	1881	Lowell,	141,000
Lynn Gas and Electric Co.,	1888 ²	Lynn,	—
Malden Electric Co.,	1888	Malden,	100,000
Mansfield Electric Co.,	1889	Mansfield,	10,000
Marlborough Electric Co.,	1886	Marlborough,	30,000
Middleborough Electric Light and Power Co.,	1889	Middleborough,	25,000
Middleborough Gas and Electric Co.,	1889	Middleborough,	—
Milford Electric Light and Power Co.,	1886	Milford,	39,300
Millbury Electric Co.,	1887	Millbury,	10,000
Miller's River Gas Light Co.,	1889 ¹	Athol,	—
Merchants' Electric Co.,	1889	Clinton,	25,000
Merrimac Electric Co.,	1889	Merrimac,	10,000
Monatiquot Electric Light and Power Co.,	1889	Braintree,	25,000
Monson Gas and Electric Co.,	1889	Monson,	20,000
Mutual Gas Light Co.,	1889 ¹	Southbridge,	—
Nantucket Electric Light Co.,	1888	Nantucket,	12,000
Natick Electric Co.,	1889	Natick,	15,700
Naumkeag Electric Co.,	1889	Peabody,	20,000
Needham Electric Co.,	1889	Needham,	10,000
Neponset Electric Co.,	1889	Canton,	50,000
New Bedford Gas Light Co.,	1888 ¹	New Bedford,	—
Newburyport Gas and Electric Co.,	1889 ¹	Newburyport,	—
Newton and Watertown Gas Light Co.,	1888 ¹	Newton,	—

¹ Date of permission to engage in the business granted by the Board.² Date of consolidation of gas and electric companies, under Act of the Legislature.

NAME OF COMPANY.	When incorporated.	LOCATION.	CAPITAL.
North Adams Electric Light and Power Co.,	1885	North Adams, . . .	\$7,500
Northampton Electric Lighting Co.,	1886	Northampton, . . .	58,700
North Attleborough Steam and Electric Co.,	1886	North Attleborough, . .	40,000
North Brookfield Electric Co.,	1889	North Brookfield, . . .	-
North Shore Electric Co.,	1888	Revere,	80,000
Orange Electric Co.,	1887	Orange,	10,000
Palmer Electric Co.,	1887	Palmer,	30,000
People's Electric Co.,	1888	Easthampton,	5,000
People's Electric Light and Power Co.,	1889	Wakefield,	10,000
Peabody Electric Light and Power Co.,	1889	Peabody,	25,000
Pittsfield Electric Light Co.,	1885	Pittsfield,	5,000
Pittsfield Illuminating Co.,	1887	Pittsfield,	25,000
Plymouth Electric Light Co.,	1888	Plymouth,	30,000
Provincetown Electric Co.,	1889	Provincetown,	15,000
Quincy Electric Light and Power Co.,	1888	Quincy,	60,000
Randolph and Holbrook Electric Co.,	1889	Randolph,	15,000
Randolph and Holbrook Light and Power Co.,	1889	Randolph,	60,000
Randolph Electric Light and Power Co.,	1889	Randolph,	25,000
R.-F. Electric Light and Power Co.,	1889	Boston,	5,000
Rockland Electric Light and Power Co.,	1888	Rockland,	15,000
Salem Electric Lighting Co.,	1882	Salem,	140,000
Somerville Electric Light Co.,	1887	Somerville,	80,000
South Hadley Falls Electric Light Co.,	1888	South Hadley Falls, . .	7,000
Spencer Gas Co.,	1886	Spencer,	-
Stoneham and Wakefield Electric Light and Power Co.,	1888	Stoneham,	25,000
Stoughton Gas Light Co.,	1889	Stoughton,	-
Taunton Electric Lighting Co.,	1882	Taunton,	30,000
Union Electric Light Co.,	1889	Franklin,	20,000
United Electric Light Co.,	1887	Springfield,	150,000
Uxbridge and Northbridge Electric Co.,	1889	Uxbridge,	20,000
Wakefield Electric Light and Power Co.,	1888	Wakefield,	10,000
Waltham Gas Light Co.,	1886 ¹	Waltham,	-
Walworth Light and Power Co.,	1888	Boston,	15,000
Ware Electric Light Co.,	1887	Ware,	15,000
Warren Electric Co.,	1889	Warren,	10,000
Webster Electric Co.,	1889	Webster,	-
Wellesley Electric Co.,	1889	Wellesley,	25,000
Westborough Electric Light and Power Co.,	1886	Westborough,	17,760
Westborough Gas and Electric Co.,	1889	Westborough,	25,000
Westfield Gas Light Co.,	1887 ²	Westfield,	-
Weymouth Light and Power Co.,	1889	Weymouth,	75,000
Whitman Electric Co.,	1888	Whitman,	20,000
Williamstown Electric Light Co.,	1888	Williamstown,	15,000
Winchendon Electric Co.,	1889	Winchendon,	15,000
Winchendon Electric Light and Power Co.,	1889	Winchendon,	12,000
Winthrop Gas and Electric Co.,	1889	Winthrop,	30,000
Woburn Electric Light Co.,	1888	Woburn,	60,000
Worcester Electric Light Co.,	1883	Worcester,	125,000

¹ Date of unanimous consent of the stockholders, allowing company to engage in the business.² Date of permission to engage in the business granted by the Board.

The following companies have bonds and notes outstanding : —

Boston,	\$292,800 00
Cambridge,	69,000 00
Chicopee,	2,900 00
Edison (Boston),	163,056 50
Edison (Brockton),	97,000 00
Edison (Fall River),	11,000 00
Edison (Lawrence),	36,700 00
Edison (New Bedford),	20,000 00
Electric Light and Patent Flooring (Amesbury),	56,416 72
Fall River,	8,650 00
Framingham,	50,000 00
Gardner,	9,700 00
Gloucester,	100 00
Great Barrington,	3,300 00
Greenfield,	11,250 00
Hudson,	5,584 85
Hyde Park,	46,152 39
Leicester,	8,900 00
Lowell,	84,000 00
Malden,	110,000 00
Marlborough,	16,250 00
Milford,	12,931 00
Millbury,	2,600 00
Natick,	17,361 40
Newburyport,	11,000 00
North Adams,	1,400 00
Northampton,	15,934 00
North Attleborough,	37,500 00
North Shore (Revere),	79,050 00
Palmer,	20,000 00
Pittsfield Electric Light Co.,	3,600 00
Pittsfield Illuminating Co.,	12,642 54
Quincy,	18,474 11
Somerville,	50,794 92
Southbridge,	10,000 00
South Hadley Falls,	4,338 62
Taunton,	4,000 00
United (Springfield),	130,508 58
Wachusett (Fitchburg),	33,000 00
Westborough,	15,000 00
Woburn,	61,040 37

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value at par of the stock held in the State on June 30, 1889:—

NAME OF COMPANY.	Whole Num- ber of Stock- holders.	Number resi- dent in Mas- sachusetts.	Value of Stock held in Massachusetts.
Adams,	8	7	\$4,500
Andover,	6	5	500
Boston,	341	144	461,100
Cambridge,	20	20	200,000
Chicopee,	6	6	10,000
Cottage City,	10	10	25,000
Dedham,	4	4	25,000
Edison (Boston),	37	17	90,100
Edison (Brockton),	21	18	45,450
Edison (Fall River),	61	55	60,100
Edison (Lawrence),	17	14	54,575
Edison (New Bedford),	102	97	80,000
E. L. and Patent Flooring (Amesbury),	19	17	33,100
Fall River,	45	39	66,600
Framingham,	11	10	24,400
Franklin (Turner's Falls),	23	23	5,000
Gardner,	35	35	26,900
Gloucester,	7	7	20,000
Great Barrington,	17	8	5,800
Greenfield,	37	33	13,800
Haverhill,	37	37	85,000
Hudson,	14	14	6,025
Leicester,	12	12	4,000
Leominster,	8	7	10,000
Lowell,	164	154	137,600
Malden,	23	22	92,300
Marlborough,	10	9	29,000
Middleborough,	8	8	25,000
Milford,	23	23	39,300
Millbury,	31	31	10,000
Natick,	18	18	15,700
Newburyport,	33	28	47,200
North Adams,	10	10	7,500
Northampton,	67	67	58,700
North Attleborough,	16	15	39,700
North Shore (Revere),	11	10	66,800
Palmer,	11	11	30,000
People's (Easthampton),	14	14	5,000
Pittsfield Electric Light Co.,	4	4	5,000
Pittsfield Illuminating Co.,	5	4	19,000
Plymouth,	6	6	30,000
Quincy,	86	86	42,300
Salem,	96	94	135,000
Somerville,	123	119	78,200
Southbridge,	12	12	25,000
South Hadley Falls,	3	3	7,000
Taunton,	38	36	29,400
United (Springfield),	38	36	140,500

NAME OF COMPANY.	Whole Number of Stockholders.	Number resident in Massachusetts.	Value of Stock held in Massachusetts.
Wachusett (Fitchburg),	25	19	\$97,930
Walworth (Boston),	9	9	15,000
Ware,	20	20	15,000
Webster,	18	18	45,000
Westborough,	16	15	17,750
Whitman,	15	15	20,000
Woburn,	49	45	55,200
Worcester,	89	86	124,200

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table : —

NAME OF COMPANY.	Rate Per Cent.	Amount of Dividends.
Boston,	6	\$56,550 00
Edison (New Bedford),	4	4,000 00
Fall River,	8	5,400 00
Franklin (Turner's Falls),	10	500 00
Greenfield,	3	450 00
Lowell,	6	7,895 10
Milford,	—	900 00
Northampton,	6	3,387 00
Quincy,	3	1,050 00
Salem,	¹ 21	25,200 00
Somerville,	7½	6,000 00
Taunton,	6	1,800 00
United (Springfield),	6	9,000 00
Westborough,	1	250 00
Worcester,	8	10,000 00
		\$172,372 10

¹ Includes an extra dividend of 15 per cent.

The following table shows the systems used, the maximum dynamo capacity and nominal candle-power of the lamps of each company, June 30, 1889:—

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
Beverly,	Thomson-Houston, . .	35	2,000
	{ Thomson-Houston, . .	1,120	2,000
	{ American,	375	2,000
	{ Brush,	1,323	2,000
Boston,	{ Thomson-Houston, . .	1,900	16
	{ Weston,	1,225	16
	{ Sun,	900	16
	{ American,	220	2,000
Brookline,	{ Thomson-Houston, . .	100	1,200
	{ Weston,	300	16
	{ Thomson-Houston, . .	1,000	16
Cambridge, ¹	Thomson-Houston, . .	{ 150	2,000
		{ 135	1,200
		{ 1,500	16
Charlestown,	Brush,	240	2,000
Chelsea,	Thomson-Houston, . .	100	1,200
Chicopee,	Thomson-Houston, . .	50	1,200
Clinton,	Schuyler,	90	1,200
Cottage City,	Ball,	60	1,600
Edison (Boston), . .	Edison,	16,400	16
	{ Thomson-Houston, . .	110	2,000
Edison (Brockton), . .	{ Edison,	{ 2,200	16
		{ 880	15
Edison (Fall River), . .	Edison,	3,360	16
Edison (Lawrence), . .	{ American,	50	2,000
	{ Edison,	5,250	16
	{ American,	35	2,000
Edison (New Bedford), . .	{ Edison,	5,440	16
E. L. and Patent Flooring Co. (Amesbury), . .	Thomson-Houston, . .	{ 90	1,200
		{ 500	16
Fall River,	Thomson-Houston, . .	{ 75	2,000
		{ 226	1,200
		{ 120	1,200
Framingham,	Thomson-Houston, . .	{ 2,000	16
Franklin (Turner's Falls),	Thomson-Houston, . .	30	2,000
Gardner,	Thomson-Houston, . .	{ 100	1,200
		{ 1,000	16
Gloucester,	Thomson-Houston, . .	130	1,200
Great Barrington, . .	{ Schuyler,	35	1,500
	{ Edison,	500	16
Greenfield,	Thomson-Houston, . .	{ 45	1,200
		{ 800	15
		{ 75	2,000
Haverhill,	Thomson-Houston, . .	{ 95	1,200
		{ 600	20
Holyoke,	{ Schuyler,	386	2,000
	{ Edison,	1,000	16

¹ Motor generators 365 H. P.

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
Hudson,	Thomson-Houston,	{ 45 200	1,200 16
Hyde Park,	{ American, Thomson-Houston,	{ 50 100 650	2,000 2,000 16
Lawrence,	Thomson-Houston,	{ 200	2,000
Leicester,	Thomson-Houston,	{ 800	16
Lowell,	Thomson-Houston,	{ 480 1,600	2,000 20
Lynn, ¹	Thomson-Houston,	{ 315 1,200	2,000 16
Malden,	Thomson-Houston,	{ 225 2,400	1,200 16
Marlborough,	{ Schuyler, Edison,	{ 55 45 450	2,000 1,200 16
Middleborough,	Thomson-Houston,	{ 60 600	1,200 16
Milford,	Thomson-Houston,	{ 95 250	1,200 16
Miller's River (Athol),	Thomson-Houston,	{ 25	2,000
Natick,	Thomson-Houston,	{ 83 800	1,200 16
New Bedford,	{ Thomson-Houston, Westinghouse,	{ 235 68 4,100	2,000 1,200 16
Newburyport,	Thomson-Houston,	{ 170 800	1,200 16
Newton,	Thomson-Houston,	{ 95 2,000	1,200 16
North Adams,	Thomson-Houston,	{ 83 500	1,200 16
Northampton,	Thomson-Houston,	{ 140 1,300	1,200 16
North Attleborough,	{ Schuyler, Thomson-Houston,	{ 90 310	1,200 1,200
North Shore (Revere), ²	Thomson-Houston,	{ 150 1,300	1,200 16
Palmer,	Thomson-Houston,	{ 50 650	1,200 16
People's (Easthampton),	Waterhouse,	{ 40	1,800
Pittsfield E. L. Co.,	Thomson-Houston,	{ 125 500	1,200 16
Pittsfield Ill. Co.,	Westinghouse,	{ 2,250	16
Quincy,	Thomson-Houston,	{ 110 500	1,200 16
Salem,	Thomson-Houston,	{ 330 800	2,000 16
Somerville, ³	{ American, Thomson-Houston,	{ 200 100	2,000 2,000
Southbridge,	Thomson-Houston,	{ 100 600	1,200 16

¹ Motor generators 85 H. P.² Motor generators 160 H. P.³ Incandescent lighting from storage batteries charged by Edco dynamos.

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
South Hadley Falls, . . .	Thomson-Houston, . . .	900	16
Spencer,	Ball,	70	1,600
Stoughton,	Ball,	70	800
Taunton,	{ Arnoux-Hochhausen, . . .	54	2,000
	{ Brush,	135	1,200
Union (Franklin), . . .	Thomson-Houston, . . .	600	16
		60	1,200
United (Springfield), ¹ .	{ Thomson-Houston, . . .	500	16
		60	2,000
Wachusett (Fitchburg), .	{ Thomson-Houston, . . .	166	1,200
		4,350	16
Waltham,	Thomson-Houston, . . .	150	1,200
		500	16
Walworth (Boston), . . .	{ Thomson-Houston, . . .	145	1,200
		400	20
Ware,	{ Ball,	70	800
		900	16
Webster,	Thomson-Houston, . . .	50	1,200
		500	16
Westfield,	{ Thomson-Houston, . . .	80	1,200
		500	16
Westborough,	{ Schuyler,	60	2,000
		45	1,200
Whitman,	{ Thomson-Houston, . . .	500	16
		50	1,200
Woburn,	{ Thomson-Houston, . . .	300	16
		50	1,200
Worcester,	{ Thomson-Houston, . . .	85	2,000
		45	2,000
	{ American,	45	1,200
		45	1,200
	{ Brush,	1,600	16
		500	16
	{ Edison,	435	2,000
		800	20

¹ Motor generator 35 H. P.

The following table shows the number of boilers, their total rated horse-power, the number of engines, and the total rated horse-power of the same, and the number of dynamos of the different companies on June 30 last; also the number of tons of coal used during the year ending on that day:—

NAME OF COMPANY.	Number of Boilers.	Total rated Horse-power.	Number of Engines.	Total rated Horse-power.	Number of Dynamos.	Coal used. Tons.
Beverly,	1	50	1	35	1	¹ 118
Boston,	24	2,925	30	3,011	79	15,597 ¹ / ₄
Brookline,	2	250	4	300	8	² —
Cambridge,	8	1,000	4	565	14	2,350
Charlestown,	3	375	4	240	8	³ —
Chelsea,	1	125	2	140	2	⁴ —
Chicopee,	1	100	1	65	1	⁵ —
Clinton,	1	75	1	75	2	180
Cottage City,	1	75	2	68	2	⁶ —
Edison (Boston),	9	1,500	11	1,545	22	5,325
Edison (Brookton),	4	390	5	475	10	⁷ 2,193 ¹ / ₂
Edison (Fall River),	3	284	3	310	6	887 ¹ / ₂
Edison (Lawrence),	3	300	5	465	9	1,754
Edison (New Bedford),	3	375	4	425	9	⁸ 1,229
Electric Light & Patent Flooring (Amesbury),	1	125	1	100	4	⁶ —
Fall River,	3	300	4	220	7	800
Framingham,	2	300	2	250	6	315
Franklin (Turner's Falls),	⁹ —	—	—	—	1	—
Gardner,	2	160	2	200	4	252
Gloucester,	2	185	2	128	3	⁸ 391
Great Barrington,	1	95	1	80	3	377
Greenfield,	2	225	2	115	3	350
Haverhill,	3	300	2	240	6	647
Holyoke,	¹⁰ —	—	—	—	16	—
Hudson,	1	80	1	60	2	123 ¹ / ₂
Hyde Park,	2	250	2	180	4	393
Lawrence,	2	300	2	200	4	¹¹ 118
Leicester,	¹² 1	80	1	60	2	⁹ —
Lowell,	6	540	3	600	15	1,845
Lynn,	5	650	3	450	13	1,889
Malden,	3	375	5	400	10	980
Marlborough,	2	210	2	110	5	⁸ 243 ¹ / ₂
Middleborough,	¹³ —	—	—	—	3	—
Milford,	2	110	2	110	3	—
Millbury,	2	120	1	60	2	⁶ —
Miller's River (Athol),	1	120	1	65	1	52
Natick,	1	125	2	120	4	368

¹ 3,362 bushels coke.² 2,031 chaldrons coke.³ 928 chaldrons coke.⁴ 383 chaldrons coke and 70 tons coke breeze.⁵ 7,862 bushels coke.⁶ Not returned.⁷ 3¹/₂ cords wood.⁸ Coal and screenings.⁹ Power leased.¹⁰ Water-power 370 H. P.¹¹ 500 tons screenings, breeze, etc.¹² Water-wheel 20 H. P.¹³ Water-power 125 H. P.

NAME OF COMPANY.	Number of Boilers.	Total rated Horse-power.	Number of Engines.	Total rated Horse-power.	Number of Dynamos.	Coal used. Tons.
New Bedford,	7	700	8	1,030	13	2,464
Newburyport,	2	200	2	180	7	800
Newton,	2	250	4	290	5	600
North Adams,	¹ -	-	1	60	3	-
Northampton,	3	290	3	305	5	² 630
North Attleborough,	³ 2	220	3	240	9	738
North Shore (Revere),	3	450	4	515	7	⁴ -
Orange,	2	120	2	110	2	344
Palmer,	1	125	1	100	2	267
People's (Easthampton),	⁵ -	-	-	-	1	-
Pittsfield Electric Light Co.,	⁵ -	-	-	-	4	-
Pittsfield Illuminating Co.,	3	210	3	180	3	922
Plymouth,	1	125	1	120	-	-
Quincy,	2	250	3	300	4	550 ¹
Salem,	6	925	4	685	13	1,735
Somerville,	3	450	3	270	7	1,000
Southbridge,	2	185	2	185	3	216
South Hadley Falls,	¹ -	-	1	100	2	-
Spencer,	-	-	3	45	2	⁶ -
Stoughton,	1	60	1	50	1	-
Taunton,	3	300	2	125	7	515
Union (Franklin),	2	200	2	150	3	310
United (Springfield),	3	645	2	600	11	-
Wachusett (Fitchburg),	2	180	1	150	4	650
Waltham,	1	156	3	170	5	⁷ -
Walworth (Boston),	-	-	2	85	3	-
Ware,	1	80	1	60	2	300
Webster,	2	230	2	140	3	260
Westfield,	2	140	2	140	4	⁸ 244
Westborough,	1	60	1	50	2	85
Whitman,	¹ -	-	1	90	2	-
Woburn,	2	250	4	270	9	700
Worcester,	6	650	9	550	16	2,906

¹ Steam bought.² Also 100 cords of wood.³ Water-power 30 H. P.⁴ Not returned.⁵ Power leased.⁶ Gas engines.⁷ 24,803 bushels coke.⁸ 40 tons coke additional.

The following table shows the number of electric lights of various candle-power represented by the dynamo capacity of the companies June 30, 1888 and June 30, 1889 :—

	1888.	1889.		1888.	1889.
16 candle-power,	52,075	80,075	1,600 candle-power,	110	130
20 " "	1,200	2,800	1,500 " "	-	35
15 " "	880	880	1,800 " "	-	40
2,000 " "	5,846	6,978	800 " "	-	140
1,200 " "	2,757	4,206			

The following table shows in feet the total length of wire, the length of underground conduit, the length of the wires in the same, the number of poles set in streets or ways and the length of streets, with overhead wires of each company, on June 30, 1889 :—

NAME OF COMPANY.	Total Length of Wire. Feet.	Length of Under- ground Conduit. Feet.	Length of Wires in Conduit. Feet.	Number of Poles set in Streets.	Length of Street with Overhead Wires. Feet.
Beverly,	35,000	—	—	138	22,000
Boston,	2,322,176	—	—	1830	—
Brookline,	213,800	—	—	1,200	211,200
Cambridge,	700,000	—	—	650	79,200
Charlestown,	226,000	—	—	60	—
Chelsea,	52,800	—	—	125	26,400
Chicopee,	21,120	—	—	200	21,120
Clinton,	73,920	—	—	150	44,880
Edison (Boston),	311,985	69,330	207,999	29	3,600
Edison (Brockton),	491,916	—	—	1,265	160,700
Edison (Fall River),	61,122	8,000	24,000	6	9,000
Edison (Lawrence),	484,187	7,200	41,947	1,140	343,200
Edison (New Bedford),	248,100	7,200	21,600	190	53,800
Electric Light and Patent Flooring Co. (Amesbury),	179,520	—	—	222	52,800
Fall River,	308,880	—	—	150	36,960
Framingham,	290,400	—	—	494	95,040
Franklin (Turner's Falls),	10,000	—	—	80	7,000
Gardner,	144,673	—	—	400	45,408
Gloucester,	24,500	—	—	17	3,960
Great Barrington,	60,463	—	—	256	23,769
Greenfield,	30,300	—	—	150	5,120
Haverhill,	175,000	—	—	250	—
Holyoke,	250,715	—	—	646	66,375
Hudson,	19,400	—	—	48	7,200
Hyde Park,	184,800	—	—	600	105,600
Lawrence,	102,960	—	—	75	19,790
Leicester,	7,920	—	—	—	7,920
Lowell,	750,000	—	—	800	75,000
Lynn,	576,000	—	—	565	407,000
Malden,	855,250	—	—	2,000	520,000
Marlborough,	92,900	—	—	122	35,000
Milford,	—	—	—	—	—
Millbury,	42,240	—	—	100	15,840
Miller's River (Athol),	30,000	—	—	160	30,000
Natick,	152,100	—	—	372	36,960
New Bedford,	344,825	—	—	450	64,590
Newburyport,	—	—	—	350	—
Newton,	250,600	—	—	960	126,700
North Adams,	24,000	—	—	51	18,000
Northampton,	277,426	—	—	550	316,800
North Attleborough,	—	—	—	1,110	32,780
North Shore (Revere),	413,620	—	—	1,100	158,400

NAME OF COMPANY.	Total Length of Wire. Feet.	Length of Under- ground Conduit. Feet.	Length of Wires in Conduit. Feet.	Number of Poles set in Streets.	Length of Street with Overhead Wires. Feet.
Orange,	54,571	-	-	175	15,000
Palmer,	54,669	-	-	157	31,680
People's (Easthampton), .	31,000	-	-	200	26,000
Pittsfield E. L. Co., . .	89,760	-	-	360	89,000
Pittsfield Ill. Co., . . .	59,011	-	-	118	18,995
Plymouth,	-	-	-	-	-
Quincy,	352,440	-	-	600	112,200
Salem,	290,950	-	-	731	175,000
Somerville,	693,790	-	-	2,000	264,000
Southbridge,	25,000	-	-	360	15,840
South Hadley Falls, . .	40,400	-	-	214	38,000
Spencer,	36,000	-	-	362	36,000
Stoughton,	76,560	-	-	310	-
Taunton,	132,000	-	-	-	31,680
Union (Franklin), . . .	110,880	-	-	320	-
United (Springfield), .	166,250	8,475	34,650	135	42,100
Wachusett (Fitchburg), .	147,840	-	-	216	84,480
Waltham,	95,300	-	-	211	29,100
Ware,	44,844	-	-	225	18,000
Webster,	105,080	-	-	325	42,240
Westfield,	70,280	-	-	174	33,000
Westborough,	70,190	-	-	228	37,600
Whitman,	184,800	-	-	650	84,480
Woburn,	307,260	-	-	1,500	264,000
Worcester,	332,550	-	-	916	322,450

The following table shows the number of motors furnished off arc and incandescent circuits, the number of single and double arc lamps, and the number of plain and copper-coated carbons used during the year:—

NAME OF COMPANY.	Motors off Arc Circuits.	Motors off In- candescent Circuits.	Motors off Power Cir- cuits.	Horse-power of Motors.	Number of Single Arc Lamps.	Number of Double Arc Lamps.	Number of Plain Carbons used.	Number of Copper- coated Carbons used.
Beverly,	-	-	-	-	30	3	-	18,000
Boston,	89	-	-	74½	1,134	1,263	1,586	1,443,501
Brookline,	1	1	-	11	20	128	108,000	-
Cambridge,	-	-	15	122	30	105	-	100,000
Charlestown,	1	-	-	1	20	98	-	95,105
Chelsea,	-	-	-	-	50	35	27,000	3,000
Chicopee,	-	-	-	-	45	-	17,000	9,000
Clinton,	-	-	-	-	56	-	30,000	-
Edison (Boston), . . .	-	233	-	623	-	-	-	-
Edison (Brookton), . .	-	12	-	44½	90	-	-	35,600
Edison (Fall River), .	-	27	-	57½	-	-	-	-
Edison (Lawrence), .	-	32	-	61	35	15	10,500	-

NAME OF COMPANY.	Motors of Arc Circuits.	Motors of Incandescent Circuits.	Motors of Power Circuits.	Horse-power of Motors.	Number of Single Arc Lamps.	Number of Double Arc Lamps.	Number of Plain Carbons used.	Number of Copper-coated Carbons used.
Edison (New Bedford), .	-	20	-	27	11	11	-	-
Electric Light and Patent Flooring Co. (Amesbury),	4	-	-	19	60	2	12,000	-
Fall River,	-	-	-	-	159	64	70,000	45,000
Framingham,	-	-	-	-	3	117	-	13,000
Franklin (Turner's Falls),	-	-	-	-	27	-	2,000	6,000
Gardner,	-	-	-	-	40	12	7,500	-
Gloucester,	-	-	-	-	38	-	24,000	3,500
Great Barrington, . .	-	-	-	-	27	-	-	-
Greenfield,	-	-	-	-	43	-	10,000	-
Haverhill,	-	9	-	22	53	35	9,000	17,000
Holyoke,	-	-	-	-	330	20	110,000	-
Hudson,	-	-	-	-	21	2	8,500	1,000
Hyde Park,	-	-	-	-	-	106	34,004	5,000
Lawrence,	-	-	-	-	98	45	2,500	44,000
Lowell,	-	23	-	66½	286	100	-	200,000
Lynn,	-	-	8	100	129	134	-	140,000
Malden,	-	1	-	1½	195	-	50,000	-
Marlborough,	-	-	-	-	62	10	17,737	6,095
Milford,	-	3	-	13½	65	-	-	-
Millbury,	-	-	-	-	27	-	-	33,000
Miller's River (Athol),	-	-	-	-	25	-	-	5,000
Natick,	-	-	-	-	14	38	4,000	7,000
New Bedford,	1	-	17	61¾	88	53	1,000	72,200
Newburyport,	-	-	-	-	124	2	22,500	20,000
Newton,	-	-	-	-	-	81	37,000	-
North Adams,	-	-	-	-	54	2	21,000	-
Northampton,	-	-	-	-	111	-	30,000	-
North Attleborough, .	9	-	-	20½	161	6	5,000	60,000
North Shore (Revere),	-	2	-	13	120	10	10,000	5,000
Orange,	-	-	-	-	31	2	9,900	-
Palmer,	-	-	-	-	7	27	14,000	-
People's (Easthampton),	-	-	-	-	30	-	-	-
Pittsfield Electric Light Co.,	-	-	-	-	68	25	20,000	-
Plymouth,	-	-	-	-	34	-	-	-
Quincy,	-	-	-	-	-	86	24,000	4,000
Salem,	-	8	-	45	133	203	2,000	144,815
Somerville,	-	1	-	3	4	150	163,250	-
Southbridge,	-	-	-	-	75	7	19,000	-
Spencer,	-	-	-	-	61	-	15,000	-
Stoughton,	-	-	-	-	70	-	-	-
Taunton,	-	-	-	-	120	20	-	40,000
Union (Franklin), . .	-	-	-	-	34	-	10,000	-
United (Springfield),	6	1	8	48½	199	25	26,000	48,000
Wachusett (Fitchburg),	-	-	-	-	131	-	12,000	24,000
Waltham,	-	-	-	-	67	-	16,900	11,550
Walworth (Boston), .	-	6	-	6½	10	30	12,000	-
Ware,	-	-	-	-	38	-	13,000	-
Webster,	-	-	-	-	18	42	7,000	-
Westfield,	-	-	-	-	110	10	20,000	10,000
Westborough,	-	-	-	-	47	-	14,600	5,000
Whitman,	-	-	-	-	26	-	-	-
Woburn,	-	-	-	-	38	28	-	25,000
Worcester,	-	-	-	-	231	223	6,000	277,300

¹ Power also furnished for six electric cars.

The following table shows the number of commercial lights of the different kinds, and the number of customers for each:—

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle-power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Consumers for both Arc and Incandescent Lights.
Beverly,	8	2,000	7	—	—	—	—	—	—	—
Boston,	1,210	2,000	210	2,870	16	130	7	65	1	35
Brookline,	20	2,000	16	703	16	8	580	16	28	—
Cambridge,	—	—	—	—	—	—	12	25	5	—
Cambridge,	32	1,200	20	1,150	20	90	4	32	11	—
Charlestown,	58	2,000	21	100	16	—	76	32	15	—
Chelsea,	40	1,200	30	—	—	—	89	16	7	—
Clinton,	—	—	—	—	—	—	21	65	—	—
Edison (Boston),	22	1,200	13	—	—	—	30	16	—	—
Edison (Boston),	67	2,000	40	22,565	16	1,000	4	32	—	—
Edison (Brockton),	—	—	—	2,084	10	—	2	65	—	—
Edison (Brockton),	—	—	—	5	13	—	6	25	—	—
Edison (Fall River),	—	—	—	1,306	16	214	24	20	—	—
Edison (Fall River),	—	—	—	25	24	—	—	—	—	—
Edison (Fall River),	—	—	—	32	32	—	—	—	—	—
Edison (Fall River),	—	—	—	1	50	—	—	—	—	—
Edison (Fall River),	—	—	—	2	100	—	—	—	—	—
Edison (Fall River),	50	2,000	3	4,240	16	310	—	—	—	—
Edison (Fall River),	—	—	—	2,202	16	—	—	—	—	—
Edison (Fall River),	—	—	—	156	24	—	—	—	—	—
Edison (Fall River),	—	—	—	31	32	—	—	—	—	—
Edison (Fall River),	—	—	—	19	50	—	—	—	—	—
Edison (Fall River),	—	—	—	5	100	—	—	—	—	—
Edison (Fall River),	—	—	—	6,223	16	419	—	—	—	—
Edison (New Bedford),	22	2,000	1	—	—	—	—	—	—	27
Electric Light and Patent Flooring Co. (Amesbury),	—	—	—	—	—	—	—	—	—	4
Fall River,	10	1,200	5	300	20	65	1	32	1	3
Framingham,	159	1,200	30	—	—	—	—	—	—	—
Franklin (Turner's Falls),	37	1,200	1	1,300	16	—	—	—	—	—
Franklin (Turner's Falls),	7	2,000	6	—	—	—	8	16	1	—

Gardner,	15	1,200	6	1,487	16	50	3	32	3
Gloucester,	17	1,200	4	-	-	-	3	65	36
Great Barrington,	1	1,500	1	396	16	61	5	50	3
Greenfield,	12	1,200	4	1,000	16	80	-	32	-
Haverhill,	39	1,200	10	600	20	164	56	20	7
Holyoke,	201	2,000	77	1,030	16	32	17	-	-
Hudson,	9	1,200	9	237	16	17	17	65	5
Hyde Park,	-	-	-	600	16	46	-	-	-
Lawrence,	120	2,000	44	-	16	-	-	-	-
Leicester,	-	-	-	450	16	29	-	-	-
Lowell,	236	2,000	87	210	16	40	-	-	-
Lynn,	141	2,000	50	1,462	16	71	43	65	2
Malden,	23	1,200	10	400	16	115	-	-	10
Marlborough,	39	1,200	14	393	16	49	-	-	2
Millford,	31	1,200	31	522	16	97	-	-	5
Millbury,	6	1,200	1	125	20	25	-	-	5
Miller's River (Athol),	2	2,000	2	-	-	-	-	-	-
Natick,	14	1,200	-	850	16	70	4	32	6
New Bedford,	111	2,000	34	3,710	16	250	-	-	-
Newburyport,	30	1,200	22	494	20	50	-	-	-
Newton,	-	-	-	42	32	86	-	-	26
North Adams,	56	1,200	1	901	16	-	-	20	1
Northampton,	22	1,200	11	358	16	-	65	32	13
North Attleborough,	42	1,200	15	608	20	-	6	65	6
North Attleborough,	-	-	-	-	-	-	-	25	-
North Attleborough,	-	-	-	-	-	-	-	32	61
North Attleborough,	-	-	-	-	-	-	-	50	-
North Attleborough,	-	-	-	-	-	-	-	24	-
North Shore (Revere),	106	1,200	21	1,220	16	102	-	20	13
Orange,	5	1,200	5	96	25	57	-	32	1
Palmer,	-	-	-	466	16	46	-	65	-
Pittsfield Electric Light Co.,	7	1,200	-	300	16	207	14	-	2
Pittsfield Illuminating Co.,	46	1,200	6	-	-	-	-	-	14
Plymouth,	16	-	9	-	-	-	-	-	-

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle-power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Consumers for Commercial Incandescent Lights off Arc Circuits.	Nominal Candle-power.	Number of Consumers for Commercial Incandescent Lights off Arc Circuits only.	Number of Consumers for both Arc and Incandescent Lights.
Quincy,	115	2,000	33	700	16	81	5	32	6	-
Salem,	28	2,000	27	30	20	72	13	32	34	11
Somerville,	38	1,200	21	400	16	61	226	25	22	27
Southbridge,	1	1,600	1	400	16	22	91	50	15	-
South Hadley Falls,	1	800	1	350	16	-	-	-	-	-
Spencer,	90	1,200	40	650	16	30	-	-	-	-
Stoughton,	20 ¹	2,000	47	40	25	54	2	32	-	16
Taunton,	126	1,200	25	2,300	16	131	2	65	3	6
Union (Franklin),	62	1,200	-	217	16	62	8	65	21	6
United (Springfield),	-	-	-	126	20	58	3	32	-	-
Wachusett (Fitchburg),	29	1,200	18	312	20	25	55	65	1	2
Waltham,	25	800	15	455	16	25	-	-	3	1
Walworth (Boston),	2	1,200	1	320	16	43	-	-	-	-
Ware,	18	1,200	7	285	16	66	1	25	-	-
Webster,	30	1,200	7	317	16	56	8	50	3	2
Westfield,	15	1,200	9	367	16	36	-	-	-	-
Westborough,	-	-	-	111	16	16	-	-	-	-
Whitman,	-	-	-	74	25	110	-	-	-	-
Woburn,	6	2,000	-	1,100	14	59	90	25	3	-
Worcester,	221	2,000	66	570	20	-	-	-	-	-

¹ Includes 17 lamps owned by Boston & Albany Railroad.

The following table shows the number of public lamps, their candle-power, the number of hours burnt per night, the number of nights per month, and the price paid per night: —

NAME OF COMPANY.	Number Public Lamps.	Nominal Candle-power.	Number Hours per Night.	Number Nights per Month.	Price per Night.
Beverly,	25	2,000	Dark to midnight, .	Every night, .	\$0 50
Boston,	935	2,000	All night,	Every night, .	0 65
	5	32	—	—	0 10 ¹ / ₈
	189	16	—	—	0 50
Brookline,	105	2,000	All night,	Every night, .	—
	35	1,200	—	—	0 25
	3	65	—	—	—
Cambridge,	105	2,000	All night,	Every night, .	—
	50	40	—	—	—
Charlestown,	118	2,000	All night,	Every night, .	0 65
Chelsea,	35	1,200	All night,	Every night, .	0 50
Chicopee,	45	1,200	Dark to 1 A. M., .	Moon schedule, .	—
	22	1,200	Dark to midnight, .	Moon schedule, .	—
Clinton,	1	25	—	—	—
	25	2,000	Av. 6½ hours, . .	Arc, every night, .	0 42
	31	30	“	Municipal, 20 nights, .	0 0916
Edison (Brockton),	18	20	“	“	0 075
	429	15	“	“	0 0665
Edison (Lawrence),	133	30	All night,	Every night, .	—
	424	20	Dark to midnight, .	Every night, .	—
Electric Light and Patent Flooring Co. (Amesbury),	49	1,200	Dark to midnight, .	Dark nights, . .	—

⁶ \$1.50 per month.

⁷ \$75.00 per year.

³ \$80.00 per year.

⁴ \$100.00 per year.

⁵ \$3.04 per month.

¹ \$180.00 per year.

² \$30.00 per year.

NAME OF COMPANY.	Number Public Lamps.	Nominal Candle-power.	Number Hours per Night.	Number Nights per Month.	Price per Night.
Fall River,	64	2,000	All night,	Every night, .	1
Framingham,	66	1,200	Dark to midnight, .	Every night, .	2
Franklin (Turner's Falls),	20	2,000	Dark to 12.30 A.M., .	26 nights, .	3
Gardner,	37	1,200	Dark to midnight, .	Moon schedule, .	4
Gloucester,	29	25	Dark to midnight, .	Moon schedule, .	5
Great Barrington,	16	1,200	Dark to midnight, .	Moon schedule, .	6
	26	1,500	Av. 6 hours, .	25 nights, .	\$0 25
	11	50			-
Greenfield,	31	1,200	Av. 5 hours, .	26 nights, .	7
	3	32			8
Haverhill,	35	2,000	Av. 8 hours, .	25 nights, .	0 47
Holyoke,	95	2,000	All night, .	Moon schedule, .	0 50
Hudson,	13	1,200	Dark to midnight, .	Every night, .	0 25
Hyde Park,	103	2,000	Av. 5 hours, .	25 nights, .	9
Lawrence,	23	2,000	Av. 6 hours, .	Every night, .	0 33½
Lowell,	150	2,000	All night, .	"	0 50
Lynn,	141	2,000	Dark to 1 A.M., .	"	0 46
Malden,	166	1,200	Av. 6 hours, .	Av. 25 nights, .	3
	900	25			10
Marlborough,	23	2,000	Dark to midnight, .	Every night, .	2
Milford,	34	1,200	Dark to midnight, .	Every night, .	-
Millbury,	21	1,200	Av. 7 hours, .	30 nights, .	6
	2	32			4
Miller's River (Athol),	14	2,000	Dark to midnight, .	Moon schedule, .	5
	21	32			0 27½
Natick,	38	1,200	Dark to 12.30 A.M., .	Every dark night, .	0 07
New Bedford,	1	32	All night, .	Av. 27 nights, .	0 45
Newburyport,	50	2,000	Dark to midnight, .	Every dark night, .	0 22
	101	1,200			

Newton,	.	.	.	.	.	80	1,200	All night,	.	.	2
Northampton,	.	.	.	.	.	32	25	Dark to 12:30 A.M.,	.	25 nights,	11
North Attleborough,	.	.	.	.	.	89	1,200	Dark to midnight,	.	Every dark night,	0 25
	.	.	.	.	.	115	1,200	Dark to 12:30 A.M.,	.		0 22
	.	.	.	.	.	15	1,200		.		
	.	.	.	.	.	4	20		.		
North Shore (Revere),	.	.	.	.	.	96	25	Av. 6 hours,	.	Moon schedule,	—
	.	.	.	.	.	5	32		.		—
	.	.	.	.	.	2	65		.		—
Orange,	.	.	.	.	.	25	1,200	Dark to midnight,	.	At least 24,	0 28
Palmer,	.	.	.	.	.	34	1,200	Dark to midnight,	.	Moon schedule,	6
People's (Basthampton),	.	.	.	.	.	30	1,800	Av. 5½ hours,	.	25 nights,	13
Pittsfield Electric Light Company,	.	.	.	.	.	42	1,200	Dark to 12:30 A.M.,	.	"	3
Plymouth,	.	.	.	.	.	18	—	6 hours,	.	"	0 35
Quincy,	.	.	.	.	.	86	1,200	Av. 7 hours,	.	28 nights,	4
Salem,	.	.	.	.	.	180	2,000	All night,	.	Every night,	0 45
	.	.	.	.	.	113	2,000		.		0 37
Somerville,	.	.	.	.	.	2	50	Dark to 1 A.M.,	.	Every night, ¹⁴	—
	.	.	.	.	.	329	25		.		—
Southbridge,	.	.	.	.	.	45	1,200	Dark to 11 P.M.,	.	23 nights,	0 27
South Hadley Falls,	.	.	.	.	.	150	40	Dark to midnight,	.	Moon schedule,	10
Spencer,	.	.	.	.	.	60	1,600	Dark to midnight,	.	20 nights,	0 33½
Stoughton,	.	.	.	.	.	70	800	Av. 7 hours,	.	20 nights,	0 25
Taunton,	.	.	.	.	.	47	1,200	Dark to 12:30 A.M.,	.	23 nights,	0 40
Union (Franklin),	.	.	.	.	.	36	1,200	Dark to midnight,	.	26 nights,	6
	.	.	.	.	.	40	25		.		15

¹ \$15.00 per month.² \$100.00 per year.³ \$90.00 per year.⁴ \$75.00 per year.⁵ \$15.00 per year.⁶ \$80.00 per year.⁷ \$83.00 per year.⁸ \$1.00 per month.⁹ \$70.00 per year.¹⁰ \$1.50 per month.¹¹ \$13.50 per year.¹² \$72.00 per year.¹³ \$62.50 per year.¹⁴ Arlington and Belmont 20 nights at a gross amount per year.¹⁵ \$10.50 per year.

NAME OF COMPANY.	Number Public Lamps.	Nominal Candle-power.	Number Hours per Night.	Number Nights per Month.	Price per Night.
United (Springfield),	{ 55	{ 2,000	All night,	Every night,	{ \$0 60
Wachusett (Fitchburg),	{ 31	{ 125	Av. 5 hours,	Every dark night,	{ 0 228
Waltham,	{ 81	{ 1,200	Dark to 1 A.M.,	Every night,	{ 0 25
Ware,	{ 40	{ 1,200	Dark to midnight,	26 nights,	{ 0 35
Webster,	{ 35	{ 1,200	Dark to midnight,	Moon schedule,	{ 0 26
Westfield,	{ 42	{ 1,200	Dark to 1 A.M.,	Every night,	{ 0 23
Westborough,	{ 49	{ 2,000	Dark to midnight,	Every dark night,	{ 0 05 $\frac{3}{4}$
Whitman,	{ 6	{ 25	Dark to midnight,	22 nights,	{ 1
Woburn,	{ 42	{ 1,200	Dark to midnight,	Every night,	{ 2
Worcester,	{ 16	{ 32	Dark to midnight,	Every night,	{ 1
	{ 25	{ 1,200	Dark to midnight,	Every night,	{ 3
	{ 8	{ 32	Dark to midnight,	Every night,	{ 4
	{ 21	{ 2,000	Dark to 12.30 A.M.,	Every night,	{ 0 55
	{ 40	{ 1,200	Dark to 12.30 A.M.,	Every night,	{ 6
	{ 70	{ 25	Dark to 12.30 A.M.,	Every night,	{ 0 55
	{ 160	{ 2,000	All night,	Every night,	{ 6
	{ 12	{ 65	All night,	Every night,	{ 6

¹ \$80.00 per year.² \$20.00 per year.⁴ Woburn, Winchester and Stoneham at a gross price per year.⁶ \$1.50 per month.³ \$12.50 per year.

The following table shows the prices charged by the several electric-light companies for commercial lights on June 30, 1889 : —

NAME OF COMPANY.	Price for Commercial Lights.
Beverly, {	Arc lights, 50 cents per night used. Incandescent lights, 65 c. p. every night, \$5.00 per mo.; 32 c. p. every night, \$3.00 per mo.
Boston, {	Arc lights under contracts, 1 lamp for 12 mos., 75 cents; for 6 mos., 80 cents; for 3 mos., 90 cents; 2 lamps for 12 mos., each 70 cents; for 6 mos., each 75 cents; for 3 mos., each 85 cents per day; 3 or 4 lamps for 12 mos., each 65 cents; for 6 mos., each 70 cents; for 3 mos., each 80 cents per day; 5 to 7 lamps for 12 mos., each 60 cents; for 6 mos., each 65 cents; for 3 mos., each 75 cents per day; 8 or 9 lamps for 12 mos. each, 55 cents; for 6 mos., each 60 cents; for 3 mos., each 70 cents per day; 10 lamps for 12 mos., each 50 cents; for 6 mos., each 55 cents; for 3 mos., each 65 cents per day. Incandescent lights under contracts, 125 c. p. for 12 mos., each lamp 50 cents per day; 65 c. p. for 12 mos., each lamp 30 cents per day; 32 c. p. for 12 mos., each lamp 20 cents per day; 16 c. p., special rates, varying from 1 1-5 to 3 cents per hour, based on average hours burned per day. Inside incandescent wiring charged to customer at cost; lamps furnished and renewed free.
Brookline, {	Arc lights, 8 cents per hour; contracts, \$100.00 per year. Incandescent lights, \$1.00 to \$1.50 per mo., 16 c. p. lamps.
Cambridge, {	Arc lights, 6 days per week to 10 P.M., \$100.00 per year per lamp; 7 days per week, \$120.00 per year; 6 days per week to 12 P.M., \$120.00 per year; 7 days per week, \$140.00 per year. Incandescent lights, 20 c. p., yearly contract, 1 lamp \$10.00, 5 lamps \$9.50, 10 lamps \$9.00, 15 lamps \$8.50, 20 lamps \$8.00 each per annum; 32 c. p., \$24.00 to \$30.00 per year; 65 c. p., \$40.00 to \$48.00 per year. Consumers pay cost of wiring, lamps and renewals.
Charlestown, {	Arc lights, 50 cents per night. Incandescent lights, 50 cents per night per group of 8, 16 c. p. lamps. Wiring and lamp renewals at company's expense.
Chelsea, {	Arc lights, 40 cents per lamp per night. Incandescent lights, 16 c. p., \$1.25 per mo.; 32 c. p., \$2.50 per mo.; 65 c. p., \$5.00 per mo. All to burn till 12 o'clock or less hours same price. Lamp renewals free.
Clinton, {	Arc lights, 1 light, \$8.33 per mo.; 2 lights, \$7.50 each per mo.; 3 lights, \$7.00 each per mo.; 4 or more lights, \$5.50 each.
Edison (Boston), {	Incandescent lights, 70 cents per 1,000 candle hours. Lamp renewals free; inside wiring charged to customer.
Edison (Brockton), {	Arc lights, 4 nights per week, each lamp \$9.00 per mo.; 7 nights, \$10.00 per mo. Incandescent lights, \$0.0172 per 16 c. p. lamp hour. Lamp renewals free.
Edison (Fall River), {	Incandescent lights, 14 cents per 16 c. p. lamp hour by meter. Inside wiring at net cost; renewals free.
Edison (Lawrence), {	Arc lights, every night till midnight, \$10.00 per mo.; 6 nights per week, \$8.00 per mo.; 3 nights per week, \$7.00 per mo. Incandescent lights, 14 cents per 16 c. p. lamp hour by meter. Renewals free.
Edison (New Bedford), {	Incandescent lights, 14 cents per 16 c. p. lamp hour. Inside wiring at cost. Renewals free.

NAME OF COMPANY.	Price for Commercial Lights.
Electric Light (Amesbury),	Arc lights, 3 nights per week, each lamp \$57.00; 4 nights, \$63.00; 5 nights, \$69.00; 6 nights, \$75.00; 7 nights, \$81.00 per year. Incandescent lights, 16 c. p. lamps, 3 nights per week, \$8.00 per year, and \$1.00 per year additional for each additional night per week; 20 c. p. lamps, 3 nights per week, \$9.00 per year, and \$1.00 per year additional for each additional night per week; 32 c. p. lamps, 3 nights per week, \$16.00 per year, and \$2.00 per year additional for each additional night per week. Rates for house lighting dependent on use to which light is put.
Fall River,	Arc lights, \$8.00 per mo.
Fitchburg,	Arc lights, 1 light, \$10.00 to \$13.00 per mo.; 2 to 4 lights, \$10.00 to \$12.00 per mo.; 5 to 9 lights, \$9.00 to \$11.00 per mo.; 10 or more lights, \$8.00 to \$10.00 per mo. Incandescent lights, 16 c. p. lamps, \$1.00 to \$1.25 each per mo.; 25 c. p. lamps, \$1.50 to \$1.80 each per mo. Inside wiring and lamp renewals at cost.
Framingham,	Arc lights, all night, 65 cents per night; until 12 o'clock, \$100.00 per year. Incandescent lights, average, \$10.00 per year until 10 o'clock. House lighting by meter, 1½ cents per hour. Inside wiring at cost; lamp renewals charged to consumers. Guaranteed life of lamps, 600 hours.
Franklin (Turner's Falls),	Arc lights, \$75.00 per year.
Gardner,	Arc lights, 4 nights per week, \$55.00 per year; 5 nights, \$65.00; 6 nights, \$75.00. Incandescent lights, 16 c. p., 4 nights per week, \$7.50; 5 nights, \$9.00; 6 nights, \$10.50 per year; 20 c. p., 4 nights per week, \$9.00; 5 nights, \$10.50; 6 nights, \$12.00 per year. Inside wiring at cost.
Gloucester,	Arc lights, \$8.00 to \$9.00 per mo. Incandescent lights, 65 c. p., \$3.00 to \$4.00 per mo per lamp; 32 c. p., \$2.00 to \$2.50 per lamp per mo. Wiring and renewals free.
Great Barrington,	Arc lights, 25 cents per night. Incandescent lights, 16 c. p., \$10.00 per lamp per year. Wiring and renewals free.
Greenfield,	Arc lights, \$100.00 per lamp per year. Incandescent lights, \$10.00 per lamp per year. Wiring free; lamp renewals at customers' expense.
Haverhill,	Arc lights, 50 cents per night per light. Incandescent lights, \$1.00 each per mo., 3 nights per week; \$1.25 each per mo., 6 nights per week; \$1.75 each per mo., all day to midnight. Wiring and renewals free.
Holyoke,	Arc lights, for 3 nights per week till 10.30 P.M., \$70.00 per year; for 4 nights per week, \$75.00; for 6 nights per week until 11 P.M., \$100.00. All lights run until 6.30 P.M. every night. Incandescent lights, until 6 P.M., \$6.00 per year; until 6 P.M. ordinarily and 10 P.M. 1 night per week, \$7.00; until 6 P.M. ordinarily and 10 P.M. 2 nights per week, \$8.00; until 6 P.M. ordinarily and 10 P.M. 3 nights per week, \$8.40; until 6 P.M. ordinarily and 10 P.M. 4 nights per week, \$9.00; until 11 P.M. 6 nights per week, \$11.00; until 12 o'clock 6 nights per week, \$12.00. First lamp free; renewals at consumers' expense. Guaranteed life of lamps, 600 hours.
Hudson,	Arc lights, \$6.25 per mo. Incandescent lights, 50 cents to \$1.25 per mo. Wiring and renewals free.
Hyde Park,	Arc lights, \$70.00 per year. Incandescent lights, \$10.00 per year until 10 P.M.; \$12.00 per year till 12 P.M.; 1½ cents per hour for 16 c. p. lamps by meter. Stores and halls wired free; lamps and renewals at customers' expense. Average life of lamps guaranteed at 600 hours.

NAME OF COMPANY.	Price for Commercial Lights.
Lawrence,	Arc lights, 3 nights per week, \$6.00 per lamp per mo.; 6 nights, \$8.00; 7 nights, \$10.00.
Leicester,	Incandescent lights, \$10.00 per lamp per year; 5 per cent-discount for all lamps when number is 5 or more. In houses for hall light, \$7.50 per year; balance of house graduated to this. Wiring and renewals at cost.
Lowell,	Arc lights, 50 cents per lamp per night until midnight. Incandescent lights, \$1.00 to \$1.50 per lamp per mo.
Lynn,	Arc lights, \$7.50 to \$14.00 per lamp per mo. Incandescent lamps, \$1.00 to \$1.25 per lamp per mo. Renewals free. Wiring, \$2.00 per light.
Malden,	Arc lights, \$10.00 per mo. Incandescent lights, \$1.00 per mo. for 16 c. p. lamps. Wiring and renewals free.
Marlborough,	Arc lights, every night, 1 light, \$8.50 per mo.; 2 or more lights, \$7.50 each; 3 nights per week, 1 light, \$7.50 per mo.; 2 or more lights, \$5.00 each. Incandescent lights, 16 c. p., 3 or 4 nights per week, \$10.00 per year; 6 nights until 9 P.M., \$12.00; until 12 P.M., \$13.50. Wiring and renewals free.
Milford,	Arc lights, outside use, April to October, \$6.67 per lamp per mo.; October to April, \$10.00 per lamp per mo. Inside use, April to October, 1 lamp 6 or 7 nights per week, \$8.00 per mo.; 2 lamps 6 or 7 nights per week, \$14.50 per mo.; 3 lamps 6 or 7 nights per week, \$20.50 per mo.; 4 lamps 6 or 7 nights per week, \$25.50 per mo. For 4 nights per week, 1 lamp, \$6.00; 2 lamps, \$10.75; 3 lamps, \$16.00; 4 lamps, \$20.00. For 3 nights per week, 1 lamp, \$5.50; 2 lamps, \$10.00; 3 lamps, \$15.00; 4 lamps, \$18.00. From October to April, 6 or 7 nights per week, 1 lamp, \$12.00; 2 lamps, \$21.50; 3 lamps, \$30.50; 4 lamps, \$38.50. 4 nights per week, 1 lamp, \$9.75; 2 lamps, \$17.00; 3 lamps, \$24.00; 4 lamps, \$31.00. 3 nights per week, 1 lamp, \$9.50; 2 lamps, \$15.00; 3 lamps, \$22.50; 4 lamps, \$28.00. Transient lights, 75 cents per night per light. All lights run to 11 P.M.
Millbury,	Arc lights, \$80.00, or 12 cents per lamp per hour. Incandescent lights, 16 c. p., \$12.00 per year, or 2 cents per hour per lamp; 32 c. p., \$25.00 per year, or 4 cents per hour per lamp; 65 c. p., \$45.00 per year, or 8 cents per hour. Inside wiring and renewals free.
Miller's River (Athol),	Arc lights, \$75.00 per year.
Natick,	Arc lights, \$8.00 per mo. every night until 10.30 P.M.; \$6.00 for lights used 4 nights in a week. Incandescent lights, \$1.00 per mo. for 16 c. p. lamps, 7 nights per week; other lamps, 6½ cents per candle per mo.; where used fewer nights per week, in proportion to the time burned. Inside wiring and renewals free.
New Bedford,	Arc lights, 50 cents per night for single light. Incandescent lights, until midnight, \$11.00 per lamp per year. Interior construction about \$1.50 per lamp; renewals free.
Newburyport,	Arc lights, 4 to 7 nights per week, 1 light, \$10.00 per mo.; 2 lights, \$9.00 each; 3 or more, \$8.00 each; 1 to 3 nights per week, 1 light, \$7.00 per mo.; 2 lights, \$6.25 each; 3 or more, \$5.67 each. Series incandescent lights, 65 c. p., 4 to 7 nights per week, 1 light, \$5.00 per mo.; 2 lights, \$4.75 each; 3 lights, \$4.50 each; 4 lights, \$4.25 each; 5 or more, \$4.00 each. 1 to 3 nights per week, 1 light, \$3.50 per mo.; 2 lights, \$3.37 each; 3 lights, \$3.25 each; 4 lights, \$3.12½ each; 5 lights, \$3.00 each; 6 or more, \$2.83½ each. Direct current incandescent, 20 c. p. lamp, 4 to 7 nights per week, \$1.25 each per mo.; 1 to 3 nights per week, \$1.00; 32 c. p. lamp, 4 to 7 nights, \$2.00 each per mo.; 1 to 3 nights per week, \$1.60. Discount of 5 per cent. on all bills paid within 5 days. Wiring and renewals free.

NAME OF COMPANY.	Price for Commercial Lights.
Newton, . . .	Incandescent lights, 1 cent per hour for 16 c. p. lamp.
North Adams, . .	Arc lights, single lamp, 40 cents per night; 2 lamps, 36 cents each; 3 at 34 cents each; 4 at 33 cents each; 5 at 32 cents each. Incandescent lights, \$1.00 per mo. for 6 nights per week; 83½ cents per mo. for 4 nights per week.
Northampton, . .	Arc lights, \$75.00 per year every night till 10 P.M.; \$100.00 till midnight; \$60.00 for one night a week till 10 P.M. Incandescent lights, \$10.00 and \$12.00 per year. For stores, wiring and renewals free; for houses, wiring and renewals at cost.
North Attleborough, .	Arc lights, \$8.00 per lamp per mo., or 40 cents per night. Incandescent 20 c. p. lamps, \$1.25 each per mo.; 32 c. p., \$2.00 each per mo.; 65 c. p., \$4.00 per mo. Interior construction and renewals free.
North Shore (Revere), .	Arc lights, \$80.00 per year. Incandescent lights, \$12.00 per year until midnight; \$10.00 until 10 P.M.; 1½ cents per lamp hour by meter. Wiring — open work, \$2.00; concealed work, \$4.00 per lamp. Renewals at expense of consumer. Guaranteed life of lamp, 600 hours.
Orange,	Arc lights, \$50.00 per year, 3 or 4 nights a week. Incandescent lights, 16 c. p., 3 or 4 nights a week, \$10.00 a year; 6 or 7 nights a week, \$12.00 a year. Wiring: stores free, dwellings at cost. Renewals free.
Palmer,	Arc lights, \$80.00 per year. Incandescent lights, on basis of \$10.00 per year till 10 P.M. Stores, wiring and renewals free; houses, wiring and renewals at cost.
Pittsfield E. L. Co., .	Arc lights, \$44.00 per year. Incandescent lights, 20 c. p. lamps, \$1.00 per mo. each; 65 c. p. lamps, \$3.00 per mo. each. Interior construction and renewals free.
Pittsfield Ill. Co., . .	Incandescent lights, 1 cent per ampere hour. First outfit of lamps free; 600 hours guaranteed life. Wiring and renewals paid by customer.
Plymouth,	Arc lights, 30 cents per lamp per night.
Quincy,	Incandescent lights, \$1.00 per mo., 16 c. p. lamp. Wiring and original outfit of lamps free. Store renewals furnished by company; house renewals by consumers.
Salem,	Arc lights, prices vary from \$8.00 to \$12.00 per lamp per mo., according to hours burned. Incandescent lights, usual price \$1.25 per lamp per mo. for 20 c. p. lamps. Special rates in many cases. Renewals free.
Somerville,	Arc lights, \$25.00 to \$125.00 per year, according to number of hours burned. Incandescent lights, 1 to 3 cents per lamp hour. Renewals free.
Southbridge,	Arc lights, single lamp, \$80.00 per year for drug stores, \$70.00 elsewhere; 2 lamps, 10 per cent. discount; 3 or 4, 15 per cent. discount; 5 or more, special rates. Incandescent lights, 65 c. p. per lamp, \$40.00 per year; 32 c. p., \$25.00 per year. Interior construction and renewals free.
South Hadley Falls, .	Incandescent lights, 6 nights per week till 6.30 P.M., \$6.00 per year; till 6.30 P.M. ordinarily and till 10 P.M. 2 nights per week, \$7.20; till 6.30 P.M. ordinarily and till 10 P.M. 3 nights per week, \$7.80; till 6.30 P.M. ordinarily and till 10 P.M. 4 nights per week, \$8.40; till 9 P.M. 6 nights per week, \$8.40; till 10 P.M. 6 nights per week, \$10.00; till 11 P.M. 6 nights, \$11.00. Prices for 16 c. p. lamps. Discount of 5 per cent. on bills paid within 5 days. Wiring and lamp renewals at cost.
Spencer,	Arc lights, 33½ cents per night.

NAME OF COMPANY.	Price for Commercial Lights.
Stoughton,	Arc lights, \$60.00 per year.
Taunton,	Arc lights, average, \$8.00 per mo. Incandescent lights, \$1.00 per mo.
Union (Franklin), . .	Incandescent lights, by meter, 1 cent an hour, 16 c. p lamp; 80 cents to \$1 00 per mo on contract. Stores wired free. Dwellings and churches at cost. Renewals free.
United (Springfield), .	Arc lights, 35 cents to 75 cents per lamp per night. Incandescent lights. Rates per lamp per year for domestic lighting: 1st lamp, \$9.00; 2d, \$8.00; 3d, \$7.00; 4th, \$6.00; 5th, \$5.00; 6th, \$4.00; 7th and all others, \$3.00. Rates per lamp per year for business lighting until 6 p.m. ordinarily and 10 p.m. 1 night per week: 10 c. p. lamps, \$5.50 each; 16 c. p., \$7.00; 25 c. p., \$9.25; 50 c. p., \$17.50; 100 c. p., \$33.50; 150 c. p., \$49.00. Until 6 p.m. ordinarily and 10 p.m. 2 nights per week: 10 c. p. lamps, \$6.50 each; 16 c. p., \$8.00; 25 c. p., \$10.75; 50 c. p., \$20.00; 100 c. p., \$38.50; 150 c. p., \$56.00. Until 6 p.m. ordinarily and 10 p.m. 3 nights per week: 10 c. p. lamps, \$7.50 each; 16 c. p., \$9.00; 25 c. p., \$12.00; 50 c. p., \$22.50; 100 c. p., \$43.25; 150 c. p., \$60.00. Until 8 p.m. ordinarily and 12 p.m. 1 night per week: 10 c. p. lamps, \$8.00 each; 16 c. p., \$10.00; 25 c. p., \$13.25; 50 c. p., \$25.00; 100 c. p., \$48.00; 150 c. p., \$70.00. Until 10 p.m. every night: 10 c. p. lamps, \$9.00 each; 16 c. p., \$11.00; 25 c. p., \$14.75; 50 c. p., \$27.50; 100 c. p., \$52.75; 150 c. p., \$77.00. Until 12 p.m. every night: 10 c. p. lamps, \$10.00 each; 16 c. p., \$12.00; 25 c. p., \$16.00; 50 c. p., \$30.00; 100 c. p., \$57.50; 150 c. p., \$84.00. All night and every night: 10 c. p. lamps, \$13.00 each; 16 c. p., \$16.00; 25 c. p., \$21.25; 50 c. p., \$40.00; 100 c. p., \$76.75; 150 c. p., \$112.00. Lamps and renewals free. Interior wiring at cost.
Waltham,	Arc lights, 6 or 7 nights per week till 12 p.m., 1 light, \$12.50 per mo; 2 lights, \$11.87½; 3 lights, \$11 25; 4 lights, \$10.62½; 5 lights, \$10.00; 4 or 5 nights per week, 1 light, \$10.00; 2 lights, \$9.50; 3 lights, \$9.00; 4 lights, \$8.50; 5 lights, \$8.00 each. Discount 20 per cent. from above prices if paid on or before the 15th of the month. Incandescent lights, 20 c. p., 6 or 7 nights per week, \$1.35 per mo.; 4 or 5 nights per week, \$1.25 each. Discount 35 cents per light if paid on or before the 15th of the month. 32 c. p., 6 or 7 nights per week, 1 light, \$2.75; 2 lights, \$2.62; 3 lights, \$2 48; 4 lights, \$2.34; 5 lights, \$2.20; 4 or 5 nights per week, 1 light, \$2.50; 2 lights, \$2.38; 3 lights, \$2.25; 4 lights, \$2.12; 5 lights, \$2.00 each; 65 c. p., 6 or 7 nights per week, 1 light, \$5.00; 2 lights, \$4.75; 3 lights, \$4.50; 4 lights, \$4.25; 5 lights, \$4.00; 4 or 5 nights per week, 1 light, \$4.50; 2 lights, \$4.28; 3 lights, \$4.05; 4 lights, \$3.83; 5 lights, \$3.60 each. Discount 10 per cent. from these prices if paid on or before the 15th of the month. Inside wiring and lamp renewals at expense of consumer.
Walworth (Boston), .	Arc lights, 35 cents per day. Incandescent lights, 1 cent per hour, or \$20.00 per year. Lamp renewals free.
Ware,	Arc lights, for use only when street lights are lighted, \$50 00 per lamp per year. Incandescent lights, \$10.00 per lamp per year in stores closing 3 nights per week at 6 p.m.; \$12.00 per lamp per year in stores open every evening. Stores wired free; dwellings at cost. Lamp renewals free.
Webster,	Arc lights, \$80.00 per lamp per year. Incandescent lights, \$10.00 per lamp per year burning until 12 p.m.; by the hour, 1½ cents per lamp per hour. Interior wiring, stores free; dwellings at cost. Lamp renewals free.

NAME OF COMPANY.	Price for Commercial Lights.
Westborough, . . .	Arc lights, \$80.00 per year. Incandescent lights, \$10.00 per year for 16 c. p. lamp; \$12.00 for 20 c. p. lamp. Wiring at cost; first lamp free; renewals at expense of customer.
Westfield, . . .	Arc lights, \$10.00 per mo. for one lamp; more than one lamp, \$8.00 per mo. A discount of 5 per cent. is made for each week-day night on which the lamp is not burned after 6 p.m. Incandescent lights, for 1 16 c. p. lamp every night until 11 p.m., \$1.25 per mo.; every night except Sunday until 11 p.m., \$1.15 per mo.; 5 nights until 9 p.m., 1 night until 11 p.m., \$1.00 per mo.; 4 nights until 8 p.m., 2 nights until 11 p.m., 85 cents per mo.; 3 nights until 6 p.m., 2 nights until 9 p.m., 1 night until 11 p.m., 70 cents per mo.; 10 c. p. lamps, 25 per cent. less than above rates; 20 c. p. lamps, 20 per cent. more than above rates. Wiring and first set of lamps free; renewals at consumers' expense. Guaranteed life of lamps, 600 hours.
Whitman, . . .	Arc lights, \$75.00 per year for one lamp, \$50.00 for each additional lamp. Incandescent lights, 16 c. p., \$10.00, 20 c. p., \$12.00 per year to 10 p.m.; 16 c. p., \$12.00, 20 c. p., \$15.00 per year to midnight. 15 per cent. discount for 5 lamps; 1½ cents per lamp hour for 16 c. p.; 2 cents for 20 c. p. by meter. Wiring and renewals of lamps at customers' expense. Guaranteed life of lamp, 600 hours.
Woburn, . . .	Arc lights, \$100.00 per year for regular service; special rates for irregular service. Incandescent lights, special prices depending on service rendered, based on 16 c. p. lamp, 1 cent per hour; 20 c. p., 1 1-5 cents; 24 c. p., 1½ cents; 32 c. p., 1¾ cents. Lamp renewals free.
Worcester, . . .	Arc lights, 1 light for 4 mos. daily, 70 cents; for 8 mos. daily, and Saturdays for 12 mos., 60 cents per night; 2 lights for 4 mos. daily, 65 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 55 cents each per night; 3 lights for 4 mos. daily, 60 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 50 cents each per night. One or more lights every night in the year, 50 cents each. Incandescent lights, \$1.50 each per mo. Lamp renewals free.

AUTHORIZATION OF GAS COMPANIES TO FURNISH ELECTRIC LIGHT.

Prior to Jan. 1, 1889, the gas companies in the following cities and towns had been authorized to furnish electric light; in the first seven by special acts, by the terms of their charter, or with the unanimous consent of the stockholders; the last nine by order of the Board:—

Dedham and Hyde Park, Woburn, Marblehead, Charlestown, Cottage City, Spencer, Waltham, Clinton,	Westfield, Brookline, Lawrence, Chelsea, New Bedford, Holyoke, Beverly, Newton.
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The gas companies in Dedham and Hyde Park, Woburn and Marblehead, are not furnishing electric light at present.

During the year the Board has granted to gas companies permission to do electric lighting in Athol, Amherst, Newburyport, North Andover, Fitchburg, Danvers, Southbridge, Wakefield and Reading.

NAME OF COMPANY.	Date of Order.	Time allowed.	Minimum Capacity.
Miller's River (Athol),	Jan. 31, .	4 mos., .	25 arc lights of nominally 2,000 candle-power each.
Amherst, . .	Feb. 23, .	6 mos., ¹	Not less than 30 horse-power and dynamo capacity to convert the same into lights and to operate motors.
Newburyport, .	June 6, .	4 mos., ¹	140 arc lights of nominally 1,200 candle-power each, and 400 incandescent lights of nominally 16 candle-power each.
Lawrence (North Andover),	Oct. 5, .	2 mos., .	Total minimum capacity for Lawrence and North Andover, 175 horse-power and dynamo capacity to convert the same into lights and to operate motors.
Fitchburg, . .	Nov. 26, .	6 mos., .	150 arc lights of nominally 1,200 candle-power each, and 500 incandescent lights of nominally 16 candle-power each.
Danvers, . . .	Dec. 2, .	6 mos., .	30 horse-power and dynamo capacity to convert the same into lights and to operate motors.
Mutual (South- bridge), . . .	Dec. 4, .	4 mos., .	80 arc lights of nominally 1,200 candle-power each, and 500 incandescent lights of nominally 16 candle-power each.
Citizens' (Wake- field), . . .	Dec. 16, .	6 mos., .	For the towns of Wakefield and Reading, with a minimum capacity of 60 horse-power and dynamo capacity to convert the same into lights and to operate motors.

¹ Time extended 3 months from expiration of this time.

ATHOL.

The Miller's River Gas Light Company, a corporation supplying gas in the town of Athol, filed its petition July 10, 1888, for authority to engage in the business of furnishing electricity for light and power in that town. The Athol Electric Light and Power Company, chartered March 16, 1888, had on the seventeenth day of May received the consent of the selectmen for the location of poles; it had also made a contract to light the streets of the town. The essential facts in the case had been ascertained at the hearing in Athol, on the appeal of F. R. Davis from the refusal of the selectmen to allow him to erect poles and wires for electric lighting, an account of which is elsewhere given, under the title, "F. R. Davis, appellant."

By request of the respective counsel, the case was continued several times. At length the two companies, as the result of prolonged

negotiations, agreed upon the transfer of the electric plant and franchise to the gas company, and the petition was granted. The population of Athol is about 5,000.

AMHERST.

The petition of the Amherst Gas Company was filed Nov. 30, 1888. In pursuance of the notice published in the "Amherst Record" and served on the petitioner and the town clerk of Amherst, the hearing was held in that town the tenth day of January, 1889. The petitioning company was represented by its president; several of its directors were present. Two members of the Board of Selectmen attended the hearing, but expressed no opinion either for or against the granting of the petition. The Thomson-Houston Electric Company by counsel appeared in remonstrance.

The gas works in Amherst were built in 1877, and supply what is known as "oil gas." It was said, in behalf of the gas company, that its business had been economically and skilfully managed. The directors, until recently at least, believed the time had not come for electric lights, but they claimed that the company had been willing to engage in the business whenever there should be a sufficient demand for such light. A considerable number of citizens were at the hearing, and the general expression of opinion was favorable to the gas company.

An agent for the remonstrant company, as early as the summer of 1887, visited Amherst with a view of interesting local capital, and finding a purchaser of the dynamos and other apparatus manufactured by that company. The Thomson-Houston Electric Company, which appeared in remonstrance, is a corporation formed under the laws of the State of Connecticut, but engaged extensively in the manufacture of electric lighting and other electrical machinery and apparatus in this Commonwealth. On the tenth day of November, 1888, that company presented a petition to the selectmen of Amherst, signed also by some fifty residents of the town, asking, in substance, that permission to erect poles and wires for electric lighting be granted to the Amherst Electric Light Company, the formation of which company was then contemplated, but which had not at the time of the hearing been chartered. There was a hearing before the selectmen on the petition, November 15. While the matter was

pending, a town meeting was called for December 13, to consider the subject, and the selectmen then decided to defer action until after that meeting. The Thomson-Houston Electric Company, its agent having failed in his efforts to secure the needed funds from the people of the town, abandoned the scheme of organizing a local corporation, and sought in its own behalf the right to erect poles and wires, and supply electric light. It was represented by prominent counsel at the town meeting, which passed the following vote : —

Voted, That this meeting recommend to the selectmen to give to the Thomson-Houston Electric Company the right to erect poles, subject to the direction of the selectmen as to location, and to string wires thereon proper for electric lighting: *provided*, that said company shall introduce said lights entirely at their own expense, and without any charge to the town: and *provided, further*, that said company shall erect and maintain one good arc street light, free of expense, to the town for so long time as they shall use the said franchise.

The selectmen then voted to grant the Thomson-Houston Electric Company the right, as recommended by the town. An agreement, under date of Dec. 17, 1888, on the basis of the above vote of the town, was executed by the company and the selectmen on the 8th of January, 1889. The grant by the selectmen was expressed in the agreement as follows : —

The selectmen of Amherst on their part, in consideration of the said agreements, and on account of said stipulations, grant to said Thomson-Houston Electric Company the right to erect and maintain poles and string wires in the streets and public places of said Amherst, for the purpose of furnishing light and power by electricity.

At the time of the hearing before this Board, it did not appear that any steps had been taken towards constructing the plant, except that a few poles had been delivered in the town. The Board is of the opinion that the Gas Company in Amherst can supply electric light more cheaply than it can be done by a separate company. The population and limited number of consumers will not afford sufficient business for two companies. As the law allows the Board, on application, to fix the price of either light, the community ought not to suffer, but should gain something by what otherwise might become a burdensome monopoly.

It may be said that a franchise has already been granted for electric lighting to the Thomson-Houston Electric Company, and that two companies will be supplying the light if authority be granted to the petitioner. It is by no means settled that the franchise can lawfully be granted to a foreign corporation. On the contrary, the Board believes it the better opinion, that, under the law as it now is, a foreign company cannot hold and exercise a franchise for this purpose in this Commonwealth.

While the expression of opinion by vote in town meeting is entitled to respect, the statutes give to the selectmen alone the power to grant specifications for the erection in the streets of poles and wires for electric-lights. It is doubtful, however, if the selectmen in the present case have exercised the power in the manner intended by the law. At the time of the hearing, no attempt had been made to locate poles. The vote of the town and the action of the selectmen have, therefore, no controlling influence with the Board in its consideration of the case.

It appeared at the hearing that the capital stock of the Amherst Gas Company, until recently, was only \$10,000. Its property was valued at about \$16,000, as some \$5,000 or \$6,000 of the earnings had been expended in the extension and improvement of the plant, — a course to be commended, and one wisely followed by many of the best companies.

As it appeared that ample dividends have been paid to the stockholders, the consumers are equitably entitled to share in this surplus, for it has been derived from the money they have paid for gas. Consequently, the attempt by the stockholders to secure the entire benefit of this surplus by the division among themselves of new shares of stock, to the amount of \$5,000, was not only unfair to the consumers, but a violation of the statute. It is but fair to state, in this connection, that the directors of the company disclaimed any intent to do an unlawful act, and frankly confessed that they were unaware of the statutes regulating the increase of the stock of gas companies. When informed of their error, they at once voluntarily took steps to correct the mistake, and called in the over-issue of shares.

The credit of the gas company is such, that a loan secured by a mortgage upon the whole property of the company could be obtained

at a low rate of interest, to meet the cost of a small electric light plant. The Board believes that electric light, in case authority is granted, can be added without making any increase of capital, and in no event should the increase exceed the absolute necessities of the company. For these reasons, and believing that the future and permanent interests of the town will be best served thereby, the order granting the authority asked for by the petitioners was adopted.

NEWBURYPORT.

The name of the Newburyport Gas Company was changed by chapter 96, Acts of 1889, to the Newburyport Gas and Electric Company, but no authority was given by the act to engage in the electric business. Subsequently, its petition for such authority was filed with this Board. After the usual notices, a hearing on the petition was held in Newburyport. The granting of the request was favored by the Newburyport Electric Light and Power Company, which was represented by its president, and by the mayor, who appeared in behalf of the city. No one appeared in opposition.

The gas company had bargained for the franchise and plant of the electric light company, on terms mutually satisfactory and in compliance with the vote of the stockholders of each company. The population of the city is in the vicinity of 15,000. The electric plant is very centrally located, while the gas works are some distance away, and are not in the best situation for an electric light plant. It is not probable that the two works will be brought to occupy the same ground; some of the advantages of consolidation will therefore be lost. But, on the whole, the Board could see no sufficient reason why the petition should not be granted, in response to the unanimous request for the same.

FITCHBURG.

In Fitchburg, a city containing in 1885 a population of 15,375, the lighting has been done by the Fitchburg Gas Company and by the Wachusett Electric Light Company, a corporation formed in 1883, under the laws of the State of Maine. At the hearing on the application of the gas company for authority to supply electric light and power, both companies were represented by the same attorney. There was no appearance by the city. A minority of the stock-

holders of the electric light company, through counsel, opposed the application ; and a paper was read during the proceedings, signed by many of the business men of the place, also in opposition.

It appeared that the gas company for some time past had shown an inclination to purchase the property of the electric company ; and recently the principal owners of the electric plant, being largely occupied by other pursuits, became willing to sell, and disposed of their stock in the interest of the gas company. An agreement for the transfer of the electric plant was made between the two companies, contingent upon obtaining the authority sought. The capital of the electric light company, at par, is \$100,000. It is proposed to increase the capital of the gas company from \$60,000 to \$100,000, if the trade shall be consummated. At least four-fifths of the holders of the gas stock have signified by vote their desire for a union of the two companies.

The electric plant needed to be enlarged, in order to meet the increasing demand for lights ; more land was wanted, and the electric company had hired a portion of the land of the gas company, to which it was about to remove its plant.

The interest of the remonstrating stockholders was valued at about \$4,000. They did not wish to lose their stock, or be compelled to sell it for the small price which had been offered for it. Either from a sense of the justice of the claim, or for reasons of policy, or very likely on both grounds, friends of the gas company concluded to purchase this outstanding stock ; and, at the opening of the hearing, the second day, these remonstrants withdrew. Some of the prominent merchants, who had signed the written remonstrance above referred to, appeared in person and stated in substance that they did not care to oppose the consolidation of the companies, but they desired better service in the supply of electric lights. The general opinion was manifestly in favor of allowing the gas company the privilege of undertaking the electric business.

The president of the gas company, in reply to the criticisms which had been made in regard to the electric lights, stated that, if allowed to do electric lighting, the company desired to be notified of any fault or defect, and the remedy would be sought at once. He expressed a willingness and the wish that the Board might hold the company to the best work.

This seemed to be a case where the community will gain something by having only one company. The business will be done by a home company, instead of by a foreign one. The capitalization of the gas company will be advantageously small. The two works, being located together, can be more economically operated. For these reasons, the petition was granted.

DANVERS.

The situation in Danvers at the time of the hearing in April last, on the petition of the Danvers Gas Light Company for leave to manufacture and sell electric light, was as follows:—

The town has a population of 7,000 or more, and about fifty miles of streets. The president and counsel of the company took the position that, if there were parties in the town who desired electric lights, the company was ready to undertake the supply; but it did not wish to engage in the business unless the town so desired. Counsel, in behalf of the town, opposed the petition, mainly for these reasons: In the fall of 1888 the town erected, upon a vacant lot of land it then owned, a building and an electric and steam plant, and put up poles, wires and lamps for the purpose of lighting its streets; and 73 lights of 1,200 nominal candle-power were in use at the time of hearing. The total cost of the plant was about \$15,000.

A petition was pending before the Legislature, supported by the almost unanimous vote of the citizens, — 194 to 7, — asking that an act be passed giving the town the right to sell electric light. Under these circumstances, the Board deemed it unwise to determine the matter at that time, and decided to await the action of the Legislature on the petition before it. The bill which was introduced, based on the petition, was finally rejected by that body. Attention was again called to the subject by the gas company, and favorable action requested. Subsequently, the case was taken up for final disposition.

The unanimity of the town in pressing its petition before the Legislature would indicate the existence of a considerable demand for commercial electric lights. As the Legislature had practically decided against giving the town power to meet the demand, the Board, believing that some provision should be made for such as desire electric lights, and that the gas company, having a small business,

was likely to be injured if a separate electric light company should occupy the territory, decided to authorize the gas company to supply electricity for light and power.

SOUTHBIDGE.

The petition of the Mutual Gas Light Company of Southbridge for authority to supply electricity for light and power, was heard in that town on the thirty-first day of October. The population of Southbridge is about 7,000. The lighting has been done by the gas company and the Southbridge Electric Company.

Prior to the hearing, the former had agreed to purchase the franchise and property of the latter company, in the event of favorable action on said petition, on terms which had been approved unanimously by the stockholders of the electric company, and by an affirmative vote on 278 shares of the stock of the gas company, 300 being the total number of its shares. No one appeared in behalf of the town, and there was no remonstrance. The petition was subsequently granted.

NORTH ANDOVER.

At the hearing on the petition of the Lawrence Gas Company for leave to supply electric light and power in North Andover, it appeared that the company had authority under its charter to furnish gas in the town, and the selectmen had given it permission to lay pipes. The selectmen expressed the opinion that the company should have the right also to furnish electric lights in the town. The village of North Andover is two miles or less from the electric plant in Lawrence. There was no opposition to the petition, which was allowed.

WAKEFIELD, ETC.

The Citizens' Gas Light Company of South Reading, Reading and Stoneham was authorized by its charter to supply gas in those towns. The name of South Reading has since been changed to Wakefield. The company filed its petition for the right to furnish electric light and power, Oct. 2, 1889. Hearings were given at Wakefield, November 20, and at the office of the Board in Boston, December 2. The towns of Wakefield and Reading were represented respectively by the chairman of the selectmen, who were present, as they stated, in

the interest of their towns, but not for the purpose of aiding or opposing the petition. Three electric companies appeared by separate counsel in remonstrance, namely: the Wakefield Electric Light and Power Company, chartered April 14, 1888; the Stoneham and Wakefield Electric Light and Power Company, chartered May 11, 1888; and the People's Electric Light and Power Company, chartered July, 1889. The Woburn Electric Light Company, by its president, claimed that the petitioner ought not to be allowed to do electric lighting in Stoneham, as that town was already occupied by the poles, wires and lights of that company.

The gas company, since its organization in 1862, has furnished gas in the three towns named in its charter. It supplies 63 street lights in Wakefield and 24 in Reading. Its authorized capital is \$100,000, of which \$95,300 has been paid in; although the value of its plant at the present time probably does not exceed \$35,000. The gas works are situated in Wakefield, near the Boston & Maine Railroad. The company for many years has laid but few additional mains. Some citizens of Stoneham complained that the company had neglected to extend its pipes in that town, even in streets where such extension would prove a profitable investment. A majority or large portion of the gas stock has lately changed hands, and the new owners promise that all reasonable demands for the extension of mains shall be complied with. Up to last October the company had not deemed it prudent to undertake electric lighting. At that time new directors were chosen who thought otherwise; and a special meeting of the stockholders was held the twenty-eighth day of October last, at which the requisite vote was passed in favor of engaging in electric lighting, and asking for authority so to do. Those then in opposition still disbelieve in the policy of the vote.

Counsel for the People's Electric Light and Power Company requested the Board to rule that parties having stock in their possession as collateral security for loans were not stockholders within the meaning of the statutes. The Public Statutes provide that "the pledger alone shall be responsible as a stockholder." No facts were found in the case which showed any violation of this principle.

During the hearing it appeared that each of the three electric companies first above named, immediately after obtaining its charter,

filed with the selectmen of Wakefield an application for permission to erect poles and wires in the streets. Hearings had been held thereon before the selectmen, but neither of the companies had been granted the desired permission. Still another application had been made by individuals, on which no favorable action was taken. In 1885 the population of Wakefield was 6,060; that of Reading, 3,539. No company is engaged in electric lighting in either of those towns. Neither of the three Wakefield electric companies, above mentioned, has any plant, nor have the stockholders of either company paid in any capital. Why the selectmen have not given to any company their consent to a location of poles did not clearly appear, but the fact was shown that they had not done so.

The application of the first organized company had been pending since April, 1888. If that company, under the law, is entitled as matter of right to a specification for the location of its poles, as some have construed the statutes, no proceedings have been instituted to enforce the right in the long time which has elapsed, and probably none would be effectual at this late day. With regard to the other electric companies, and the gas company, in case it is given the right to do electric lighting, the selectmen, in their discretion, can give or withhold their consent. Such being the situation, there was much force in the claim of the gas company, that the desired authority should be given it by this Board, so that company might make application to the selectmen, and have its claim considered with the rest. There is scarcely room for two lighting companies in Wakefield and Reading. It would be the most favorable termination of the whole matter, if, by some arrangement or combination of interests, the gas company can be put on a footing to do the whole work. The capital stock of the gas company is now, and probably always was, much too large. It should be reduced, unless the excess over the real value of the property can be made available to cover the cost of an electric plant. Even then some reduction might be advisable.

In the belief that the end above suggested will be accomplished, the authority for which the gas company applied was granted for the territory of Wakefield and Reading.

CLINTON GAS LIGHT COMPANY, APPELLANT, *vs.* MERCHANTS ELECTRIC COMPANY.

The selectmen of the town of Clinton, Oct. 1, 1889, voted to grant the Merchants Electric Company, which was chartered Sept. 10, 1889, the right to erect poles and wires for the purpose of supplying electric light and power; and an appeal was taken therefrom by the Clinton Gas Light Company. The appeal was filed with this Board the fifth day of October. Both companies were represented by counsel.

The following notice was served on the town clerk of Clinton, October 7, and published in the "Clinton Courant" October 12 and 19:—

NOTICE.

IN BOARD OF GAS AND ELECTRIC LIGHT COMMISSIONERS,
BOSTON, Oct. 5, 1889.

On the appeal of the Clinton Gas Light Company from the order of the selectmen of Clinton, granting permission to the Merchants Electric Company of Clinton to erect poles and wires in certain streets in said Clinton,—

Ordered, That a public hearing be given thereon, at the court room in Clinton, on Wednesday, the twenty-third day of October, current, at 1.30 o'clock P.M.

A true copy.

Attest:

WALTER S. ALLEN, *Clerk*.

It appeared in evidence that the town clerk informed the chairman of the selectmen of the notice. A majority of the selectmen had read it, and were present at the hearing held in accordance with the notice. There was no formal appearance in behalf of the town. It was also shown that the clerk of the selectmen, one of the Board, after the above vote, was in substance verbally informed through counsel for the appellant that an appeal therefrom would be taken. After the appellant had put in its evidence and rested, counsel for the Merchants Electric Company asked that the appeal be dismissed, as no written claim of appeal had been filed with the selectmen. In view of the facts above stated, the Board declined so to rule.

The Clinton Gas Light Company, Aug. 19, 1887, was authorized by this Board to engage in the manufacture of electric light; and,

thereupon, it purchased the electric plant which was then in operation in the town. On the twelfth day of October of the same year the selectmen gave the company a writing, specifying where the posts for wires might be located. Poles have been erected at all the locations so specified, and the gas company during the last two years has been supplying both gas and electric light.

It was contended by counsel for the appellee that the specification given by the selectmen was invalid, for the reason that the gas company presented no written petition therefor, as mentioned in section 4, chapter 385, Acts of 1887. But the Board is inclined to the opinion that the words included in parentheses in said section — “upon petition in writing by said company” — are directory, and that the omission to present a petition in writing is not fatal to the legality of the location. It is, however, the better practice to present such a petition. The defect, if it be such, can now readily be remedied; and the point does not essentially affect the merits of the appeal.

In May, 1889, the gas company made written application to the selectmen, requesting them to specify locations for additional poles, which the company desired to use for incandescent lighting. The poles and a dynamo for the purpose had then been bought. On the fourteenth day of October the selectmen granted the request; and, at the time of the hearing, the new poles were set and nearly all the wires strung. The appellant company is now equipped for supplying incandescent as well as arc lights, and its officers assert their ability and readiness to meet all demands for such lights, whether for the public streets or private consumers.

It appeared that, at a town meeting held Aug. 3, 1889, the selectmen were authorized to contract for the lighting of the streets with electric lights for a term of five years; and such a contract was entered into with the Merchants Electric Company by the selectmen in behalf of the town, dated Oct. 17, 1889, three days after the selectmen had fixed the location of additional poles by the gas company.

The town, under the law, is entitled to have its streets lighted by the gas company at a fair price, with either gas or electric lights or with both, as the town may choose. This the tax payers ought to

be willing to pay, and more should neither be asked nor expected of them.

It may be true, as was suggested by a prominent citizen of the town, that the gas company has been rather "slow," and has not pushed its business as rapidly as it might have done. But it appeared that all the lights had been furnished which people asked for, except that three or four had applied for incandescent lights who could not be properly supplied until the recent consent of the selectmen for the erection of additional poles. The gas company, it is believed, is now able to meet all reasonable demands of the citizens and of the town for lights; and this Board expects that the officers and managers of the company will see to it that this belief is fully justified.

The population of Clinton is about 10,000. There is, in the opinion of the Board, at the present time, no sufficient and justifiable ground for encumbering the streets with the poles and wires of a separate electric company. The appeal is therefore sustained, and the action of the selectmen reversed.

CANTON ELECTRIC COMPANY, APPELLANT, *vs.* BLUE HILL ELECTRIC COMPANY.

Appeal from the decision of the selectmen of Canton, granting permission to the Blue Hill Electric Company to erect and maintain poles and wires along the highways of the town. There was some doubt about the date of the permission, whether the seventh or fourteenth day of August last. The appeal was filed with this Board September 13, — too late, it was claimed, if it should be found that the final decision of the selectmen was not until the later date above named. But during the hearing it became evident that the appeal was filed within thirty days from the notice of the decision, and thus was seasonable, within the meaning of section 5, chapter 382, Acts of 1887.

The appeal is sustained, and the permission of the selectmen revoked, for the reason that the selectmen did not give a public hearing and notice of the same, such as are contemplated by the third section of said chapter 382, before granting the permission.

Three companies have been chartered under the general law for the purpose of supplying electric light in Canton, namely: the Neponset

Electric Company, March 28, 1889; the Canton Electric Company, July 13, 1889; and the Blue Hill Electric Company, Aug. 30, 1889.

Section 3, above cited, provides as follows:—

In any city or town in which a company is engaged in or organized for the purpose of the manufacture and sale of electric light, no other company shall lay or erect wires over or under the streets, lanes and highways of such city or town for the purpose of carrying on its business, without the consent of the mayor and aldermen of such city or selectmen of a town, after a public hearing and notice to all parties interested.

The selectmen, July 15, 1889, voted to allow the Canton Electric Company, the second company in date of organization, the right to erect poles and maintain wires for electric lighting. As was admitted, there was no previous public hearing; and no notice of any hearing in the matter was given by the selectmen to the public or to the Neponset Electric Company, a corporation organized in March preceding, and clearly entitled to notice. It was contended that the Canton company, having no valid grant, had therefore no right of appeal under section 5 of said chapter 382. But this view is untenable; for it was a company aggrieved, as it could at any time renew its application to the selectmen for the privilege of locating its poles and wires. Both this company and the Blue Hill Electric Company put up some exhibition lights in the town.

Notice of a public hearing on the application of the Blue Hill Electric Company was sent to the other two electric companies, which was quite general in its language, and named no hour for the hearing. These defects counsel for the appellant thought vital. But the appellant company was not injured by them, as its president, in reply to the notice, wrote to the selectmen that it would not be convenient for him to attend the hearing on that day. In the final determination of the case the point becomes immaterial, as the Board is of the opinion that notice to others should have been given. It would seem that the Legislature, in requiring a public hearing, intended that some public notice of it should be given by the selectmen, either by posting or by publication in a local newspaper. It is true the editor of the "Canton Journal" learned of the proposed hearing, and published the following under local news, which it was claimed was a sufficient notice to the public:—

The selectmen have granted a public hearing at their room next Wednesday evening to those who are immediately interested in the electric

light question. It is expected that at this meeting all matters will be settled satisfactorily to the best interests of the town.

This had none of the usual characteristics of an official notice, and, besides, was misleading in terms, implying that only the companies — the immediate parties in interest — would be heard.

Upon the question whether more than one company, or which of several companies, should be allowed to do the lighting, intelligent citizens, in behalf of the public, often give valuable information, as has been shown at some of the hearings before this Board.

The commissioners are confident in the correctness of their conclusions in this case, and have arrived at them with less hesitation because they believe that no hardship can result therefrom, as there has been no large expenditure of money by either of said companies. The decision will tend to induce a wholesome practice, not only called for by the statutes, but such as in its application will better secure fairness and justice to all parties concerned in other similar cases which are likely to arise.

F. R. DAVIS, APPELLANT.

Appeal of F. R. Davis from the decision of the selectmen of Athol, May 23, 1888, refusing to grant him the privilege of erecting poles and wires in and along the public streets of the town.

In a communication notifying Mr. Davis of the rejection of his petition, the selectmen gave as the reason for their action that they did not believe it for the best interest of the public to have two electric light companies doing business in a town of that size.

It appeared at the hearing on the appeal, which was held in Athol, that a charter was granted, March 16, 1888, to the Athol Electric Light and Power Company, a corporation established at Athol for the purpose of producing light, power and heat by electricity, and selling the same. Its articles of association bear date Jan. 20, 1888. Eleven days later, the selectmen granted to those so associated a general consent to erect poles in the streets. Such consent was given to the electric light company in a more specific form the seventeenth day of May following.

On the day of the hearing, June 22, 1888, the dynamos, poles, wires and other electrical apparatus of the company had been delivered

in the town, and some of the poles had been erected. It had also made a contract with the town for lighting the streets.

Mr. Davis, the appellant, was the manager of the gas company in Athol, known as the Miller's River Gas Light Company, and was under contract to act in that capacity for a term of years. In the month of April, 1888, he obtained a dynamo, and, by the use of poles set on private land, he ran wires and was supplying a few electric lights at the time of the hearing. This he had done, as he claimed, in the interest of the gas company.

The hearing was largely attended, and many of the citizens, regarding the interest of Mr. Davis as that of the gas company, testified that, in their opinion, the gas company could not continue in business should it lose any considerable portion of the lighting, and that its suspension would be a great detriment to the place. Hence they expressed the wish that in some way the gas company might be allowed to do electric lighting.

At the request of counsel, the case was postponed from time to time. Negotiations were entered upon between the gas company and the Athol Electric Light and Power Company, looking to a union of the two companies; in consequence of which the gas company filed its petition for authority to engage in electric lighting. At length, by agreement of the counsel of both companies, the appeal was dismissed and the decision of the selectmen confirmed, — a result which the Board deemed most beneficial to all the parties in interest.

ROXBURY ELECTRIC LIGHT COMPANY, APPELLANT.

Appeal by the Roxbury Electric Light Company from the following order of the aldermen of the city of Boston, passed Feb. 18, 1889: —

Ordered, That permission is hereby refused the Roxbury Electric Light Company to erect wires over or under such of the streets, lanes and highways of the city of Boston as are south of East and West Chester parks for the purpose of carrying on said business, as asked for in the petition of said company, dated Feb. 4, 1889, and presented to the Board Feb. 4, 1889.

The appellant company was chartered under the general laws, Feb. 2, 1889, with a capital stock of \$50,000, for the purpose, among other things, of supplying light, heat and power, by means of electricity, "in that part of Boston called Roxbury, in the Commonwealth of Massachusetts, and its vicinity."

The companies actually engaged in the manufacture and sale of electric light and power in the city of Boston at that time were the Boston Electric Light Company, chartered Feb. 14, 1888, which appeared in remonstrance; the Edison Electric Illuminating Company of Boston, chartered in 1885, corporations organized under the laws of this State; and the Charlestown Gas Light Company, which supplies electric light only in that portion of Boston which was formerly Charlestown. The Edison Company did not appear at the hearing, but has since filed its objection to the granting of the petition. The Citizens' Electric Light Company, whose property is under lease to the Boston Electric Light Company, also appeared as remonstrant. During the hearing it appeared that a corporation called the Boston Electric Light Company was organized in the State of Maine Nov. 17, 1886, with an authorized capital of \$1,000,000. At that time there were five different electric light companies supplying light in the city of Boston; namely, the Citizens' Electric Light Company, the Edison Electric Illuminating Company of Boston, the Brush Electric Light Company, New England Weston Electric Light Company, all Massachusetts corporations, and the Merchants' Electric Light and Power Company, a foreign corporation. The Boston Electric Light Company of Maine at once proceeded to purchase the property of the three companies last named, and to lease for a term of nine hundred and ninety-nine years the property of the first-named company. Formal authority for the acquisition of the property so purchased was granted by the aldermen of Boston, July 5, 1887.

In accordance with the opinion expressed by this Board in its third annual report, January, 1888, that the electric lighting business in the State ought to be done by domestic instead of foreign corporations, the present Boston Electric Light Company was organized here Feb. 14, 1888, with a capital of \$1,000,000, to take the place of the Maine corporation, and for the avowed purpose of acquiring and succeeding to the enjoyment of the rights and property of that company. A formal sale and transfer of the same was effected under date of March 1, 1888, since which time the Boston Electric Light Company of Massachusetts has been in the actual possession and control of all the rights, property and lighting business before enjoyed by the Maine corporation. This purchase included the lamps, lines and fixtures then located in the Roxbury and Dorchester districts, the

greater part of which had been erected by the Brush Electric Light Company. In the territory covered by the above order the Boston Electric Light Company had, at the time of the hearing, thirty-four miles of wire over portions of some forty different streets, one hundred and seventy-seven arc lamps, a few incandescent lamps lighted from the arc circuits, the cost of which property was estimated at about \$21,000.

On the foregoing facts and the further evidence in the case, ought the order of the aldermen to stand, or should it be reversed? As at present advised, this Board has no power to modify the order. Its consent or refusal must be simply to the permission which was asked from and denied by the aldermen. The grounds of that denial are not stated. It is evident that the charter of the appellant company, in its language, "Roxbury . . . and its vicinity," is broad enough to enable the company to do electric lighting anywhere in the city of Boston; although counsel stated that such was not the intention, and that the company would be willing to be limited in its area. But there is now no natural division between Roxbury and the old territory of Boston, the "neck" having become a wide part of the city. It is not clear or probable that the company could be legally and perpetually confined within a space smaller than that covered by the charter. Moreover, had permission been granted in the form prayed for, or if the appeal were now sustained, would any power rest with the mayor and aldermen to exclude the company from any street included in the order, however desirable it might become hereafter to do so? The doubtful situation should be avoided, if possible.

Outside of these considerations is the more general inquiry, whether the establishment of a rival company in Roxbury would, under the circumstances, be justifiable, or beneficial to the community. The Board is mindful that the persons interested in the appellant company are respected citizens, supported by the petitions of large numbers of the residents of Roxbury, and are entitled to the most careful consideration. The testimony showed that a considerable demand for incandescent electric lights has sprung up in Roxbury during the past year, and that the Boston Electric Light Company in some instances has been asked for estimates for such lights, although no application under the statute has been made to

this Board requesting that any company be ordered to furnish them. To meet this demand, it is necessary that a new central station be erected in that part of the city. It would seem that the Boston Electric Light Company could do this somewhat cheaper than another company, as it has on hand a large part of the needed equipment, not now in use, by reason of giving up the station recently on Congress Street. The poles already erected in Roxbury and Dorchester could be used for both incandescent and arc wires. The officers of the company stated that there would be no increase of capital stock for this purpose, and none seems requisite. A new company would have no advantage in the purchase of materials or supplies; on the contrary, as a rule, the larger the quantities bought the lower the prices, and no reason was offered why the present case would prove an exception. The appellant claimed that it could supply incandescent lights at prices lower than are charged by the other companies in Boston. The Board, however, is unable to discover, either from the testimony or from observation and knowledge of other companies, any special advantages a new company in Roxbury would have over the existing ones in the cost of producing the light. The offer of the appellant to furnish, for one year, incandescent lights of sixteen candle-power for one cent each per hour, might afford the consumer a slight temporary saving; but the brevity of the time implies great doubt as to the profits, and it cannot be supposed that any company would long continue to do business at a loss. Certainly there ought to be an apparent saving of cost somewhere, as a justification for encumbering the streets with the lines of another company. The appellant did not press its claim on the ground of any public benefit to be gained by competition, thus recognizing the protection to the community provided in the statutes for the regulation and control of lighting companies. The history of electric light companies in Boston, as above shown, and of corporations doing a similar business in various parts of the country, affords no basis for believing that a new company, if allowed to engage in business in Roxbury, would long remain by itself; as competition for a period would probably be followed, as in the former instances, by consolidation or absorption. Whether or not such union would be for the public good, the companies would see a gain thereby; and no power

rests in this Board, or elsewhere under existing laws, which could effectively prevent some form of consolidation.

The Boston Electric Company expressed its readiness to erect a plant in Roxbury, and to furnish all the incandescent lights in that part of the city which may be required. The community has the right to demand of the company a supply at the lowest remunerative prices, and consumers have a right to appeal to this Board if they believe the prices charged are too high.

The able counsel for the appellant claimed, as a reason why the order of the aldermen should be reversed, that the Boston Electric Light Company had not obtained at the time of the hearing full right to do business under chapter 382, section 3, Acts of 1887, and had not acquired a complete legal title to the franchises and property it was then using. To some extent this was true; but its rights as a remonstrant existed, and it could not well be presumed that the individuals constituting the Maine corporation, which had been formally granted the rights exercised by it, would be treated with less consideration and denied the privilege of enjoying the same rights after they had organized under the laws of our State, in pursuance of a suggestion from this Board, and thus secured increased contributions to the city and the Commonwealth in the form of taxes. Since the hearing, as is well known, some of these rights have been more definitely secured. The appeal is therefore dismissed.

DEDHAM AND HYDE PARK GAS AND ELECTRIC LIGHT COMPANY,
APPELLANT, *vs.* DEDHAM ELECTRIC LIGHT COMPANY.

Appeal from the consent of the selectmen of Dedham, given to the Dedham Electric Light Company, June 21, 1889, for the location of poles and wires in the streets.

The hearing on the appeal was in Dedham, Sept. 6, 1889. The appellant company was represented by its agent, the electric company by counsel. Some members of the town committee on lighting were present, but not as parties.

The gas company was chartered about thirty years ago. In 1886, by chapter 206 of the Acts of that year, its name was changed to the Dedham and Hyde Park Gas and Electric Light Company, and the company was authorized to furnish the inhabitants of Dedham

and Hyde Park with electric light. Section 3 of the same chapter provides that "The said corporation, first having obtained the consent in writing of the selectmen of the respective towns, is hereby authorized, under the direction and control of the selectmen, to dig up the grounds in any of the streets, and to erect and maintain lines of wire upon or above the surface of the streets."

The Dedham Electric Light Company was chartered under the Public Statutes, Dec. 5, 1888, and the following day it filed its petition with the selectmen for the location of poles.

The gas company then for the first time, Jan. 12, 1889, made request of the selectmen for the consent required by the section above quoted. The same was heard February 7, and was by vote indefinitely postponed.

The petition of the electric company was heard February 14, and on the eighteenth day of February the selectmen voted that both companies have leave to withdraw.

The adjourned annual town meeting, April 1, 1889, appointed a committee with power to contract for lighting the town with electric lights for a term of ten years, at a price not exceeding \$5,000 a year. Each company, in response to the invitation of the committee, sent in proposals; but, in reply to a request for modified bids, only the electric company submitted prices.

The gas company, April 13, again petitioned for leave to set poles, and the electric company presented a like petition June 18. On the twenty-first day of June the selectmen denied the petition of the gas company, and gave the right to the electric company, and from that grant appeal was taken to this Board. In accordance with the instructions of the town, its committee made a contract with the Dedham Electric Light Company for lighting the town ten years, at the price above named. The agent of the appellant company very frankly stated that he considered the contract a favorable one for the town, and that he thought the town ought to have the advantage of it. He was not prepared to say that his company would be willing to make a like contract.

So far as the Board is informed, it has not been decided by any adjudication of our courts that the selectmen, under the language of the section quoted, could be compelled to grant their consent to the gas company. Moreover, as that company did not ask such consent

until nearly three years had elapsed, it could be reasonably inferred from the long omission to do so that the company did not care to undertake the electric lighting business in that town, and another company might well feel at liberty to occupy the ground. Nor did it appear that the gas company had taken any steps towards introducing electric lights in Hyde Park.

Under these circumstances, the Board thinks the selectmen were justified in giving their consent to the Dedham Electric Light Company. The appeal is therefore dismissed, and the action of the selectmen confirmed.

MIDDLEBOROUGH ELECTRIC LIGHT AND POWER COMPANY, APPELLANT, *vs.* MIDDLEBOROUGH GAS AND ELECTRIC COMPANY.

Appeal of the Middleborough Electric Light and Power Company from the vote of the selectmen of Middleborough, passed April 3, 1889, granting permission to the Middleborough Gas and Electric Company to erect and maintain poles and string wires in and through the public streets and ways of that town. At the hearing before this Board, the following facts appeared:—

The appellant company was chartered Jan. 1, 1889, for the purpose of doing an electric light and power business in the town of Middleborough. The selectmen of the town, January 12, gave the company written permission, for the term of five years, to set poles and string wires. From this grant of the selectmen there was no appeal.

Afterwards, namely, January 21, the Middleborough Gas and Electric Company was chartered for the purpose of furnishing gas and electricity for light and power in said town, and petitioned the selectmen, February 16, for permission to erect poles and wires. After a public hearing, such permission was given by the selectmen in writing on the third day of April, in the same form as to the first company above named, and for the like period of five years. The first company appealed therefrom April 23, under section 5, chapter 382, Acts of 1887.

By the testimony of some of the selectmen, those officials considered they were under equal obligations to each company, and were not influenced by the belief that one company could produce electric light more cheaply than the other.

Gas works were established in the town in 1847, and were purchased by a Mr. Wilbur in 1856. They were operated by him for some thirty years. In the latter part of 1888, Mr. Wilbur having deceased, the gas works, or a controlling interest in them, changed hands, and the owners, Jan. 21, 1889, as above stated, obtained a charter under the name of the Middleborough Gas and Electric Company.

It appeared at the hearing that each of the companies had canvassed for electric light customers among the business men of the town, and each company expressed the purpose and desire to supply all parties with such electric lights as might be wanted.

The electric company, the first company chartered, had shown an earnest intent to have its plant erected by July 1, 1889, in compliance with its grant from the selectmen. It had purchased land conveniently located, with water power, at a cost of \$8,000, and had commenced the construction of a substantial brick building, which was well under way at the time of the hearing in May.

The gas company, the second company, also had begun the enlargement of its buildings so as to hold an electric plant, and had erected some poles, a part of which were put up after the appeal was taken to this Board. Neither company had, at the time of the hearing, received from the selectmen any writing specifying the locations for poles, as required by the Public Statutes, chapter 109, section 3: but the selectmen, during the hearing on the appeal, gave their verbal consent for the location of certain poles by the gas company.

The town, at its March meeting, appointed a committee to contract for lighting the streets, and each company submitted written proposals therefor. A contract for two years was made with the Middleborough Gas and Electric Company, but so far varying from the basis as understood for the first proposals, that it did not clearly appear which company made the lowest price for electric lights. The committee, as it turned out, wanted some electric, some gas, and some naphtha lights.

The fire district, so called, which it is proposed to light, contains about three thousand five hundred people, and has some fourteen miles of streets. The population of the whole town is six thousand, with one hundred and fifty miles, more or less, of streets.

There was some dispute as to the sufficiency of the water power, which the appellant had purchased, during a short period in the summer, but a minimum of seventy-five horse-power was guaranteed in the sale, and during the most of the year it would probably be much greater.

Various statements and representations of more or less interest were made, but the above are the leading and material facts.

The hearing was attended by many of the citizens. The companies and the town were represented by able counsel, and the case was thoroughly tried during two days at Middleborough. The arguments were made in Boston at a later date. Counsel for the town claimed that the town had the right to operate an electric plant and light its streets by electricity; and that, if the town could do this by its officers or agents, it could do the same through, or by contract with, a company or other persons. He also frankly admitted that, if two companies were allowed to do electric lighting in that town, one of them must sooner or later give up the business.

The Board is called upon in this case to decide whether, under the circumstances above stated, a second general franchise or permission by the selectmen shall be confirmed after a like prior permission has already been granted to another company.

All conversant on the subject agree that one central electric plant is sufficient for a town like Middleborough, and that two companies would not long survive. It is an insurmountable fact that the grant to the Middleborough Electric Light and Power Company must stand. In the opinion of the Board, in view of all the facts, it is not only the logical necessary result, but the most just, that one company should have the electric and the other the gas business. As between the two companies, this conclusion is the more satisfactory and unavoidable when it is remembered that the Board now bears the same relations to electric companies as to gas companies, and in the exercise of its duties it desires to hold the scales as evenly as possible between the two classes of companies. The Board is mindful that it is convenient and as a rule more advantageous to the consumers that all the lighting in places of this size be done by one company. In the present instance, however, it is beyond the power of the Board to effect that end. A union of the two companies on some equitable basis is doubtless advisable.

Appeal sustained, and the permission of the selectmen to the Middleborough Gas and Electric Company revoked.

VIOLATION OF LAWS.

The Attorney-General has been notified, as required by the statutes, that the following companies have violated the laws as below stated: —

The Walworth Light and Power Company, in running wires across streets without the consent of the mayor and aldermen of the city of Boston.

The Middleborough Gas and Electric Company, in doing the same without consent, the consent of the selectmen of Middleborough having been revoked, on appeal to this Board.

The Amherst Gas Company, in selling additional stock representing its surplus, and dividing the proceeds of the same among the stockholders: also in measuring gas through meters which have not been duly sealed and stamped, and do not register the quantity of gas in cubic feet.

The Amesbury and Salisbury Gas Company, Fall River Gas Works Company, Miller's River Gas Light Company at Athol, Spencer Gas Company, and the Cottage City Gas Company, in exceeding the ten per cent. limit of carbonic oxide.

The Gardner Gas Light Company, Norwood Gas Light Company, Orange Electric Light Company, and the United Electric Light Company of Springfield, in neglecting to make the annual returns to the Board.

The last-named cases were not reported to the Attorney-General until the returns had been long overdue. In but few cases has any good reason existed why the companies, both gas and electric, should not have made their returns by the second Wednesday of September, as the statute now provides. There is no penalty for omitting to do so, except, perhaps, the serious one of enjoining the company from doing business. A more speedy and practical remedy would be found in a statute imposing a fine for delay, as in the case of steam and street railways. A large number of companies were in some measure delinquent the past year in presenting their returns,

thus delaying, as heretofore, the preparation of the report to the Legislature.

The material facts in the case of the Walworth Light and Power Company, as the Board understands them, are substantially as follows: The company was chartered May 8, 1888, for the purpose, among other things, of supplying electric light and power in the city of Boston, and it is now engaged in that business, having an electric plant on Hawley Street. The company contracted for the erection of wires which cross the streets. It made application to the mayor and aldermen for permission to run wires over the streets. Such permission was refused, and the appeal therefrom to this Board has been withdrawn. The company does not claim that it has ever received permission from the mayor and aldermen to erect wires over the streets, but its officers allege that the company has brought itself within the law, as it has, with the exception of one or two wires, transferred to those using the lights, or to other parties, the title to so much of the wires as is directly over the street. The company supplies the electricity, lamps and carbons; owns and maintains the wires and structures supporting them, except as stated; takes care of the lamps; and consumers pay the company a price agreed upon per lamp for light.

The leading facts in the Middleborough case will be found in another part of the report, under the title, "Middleborough Electric Light and Power Company, appellant, *vs.* Middleborough Gas and Electric Company."

ACCIDENTS.

The companies have reported during the year four cases of accident by inhaling gas, two of which were fatal, and one death by electricity. The facts relating to them were as follows. At Amesbury water gas is used; at the other places, at the time of the accidents, coal gas was used.

John Fahey, age thirty-five, retired about twelve o'clock at night, March 9, 1889, at the Boston Hotel, Boston, in a room ten feet long, eight feet wide and seven feet high, with one window and one door, both fitting loosely. About noon the next day the smell of gas was noticed. The door was unlocked, and the man found in an uncon-

scious state. The gas was escaping, the jet being about half on. A physician was called, who reports that the patient was unconscious, with feeble, quick pulse, extremities cold, and could not be roused until some time after the administration of hypodermic injections of ammonia and brandy, and artificial respiration. Six hours after, the man was able to walk, and left the hotel. He said he blew out the gas.

James L. Graves, a plumber, in tapping a main at Greenfield, March 18, 1889, for the purpose of putting on a governor, became faint from inhaling the gas. He had stepped to a window to get air, when he fell through a trap door. He was insensible a few seconds, and somewhat bruised, but at work again the next day.

Winnie Boyle, age twenty-one, employed as a domestic in the family of Mr. John F. Woodman, was found dead in bed at Amesbury, on the morning of May 16, 1889, about ten minutes before seven. She retired a little after eight the evening before. There being no response from her when called in the morning, her room was entered. The odor of gas was perceptible in the stairway leading to the room. The room was full of gas, and the burner open. She was found lying across the bed, her face red, and frothing at the mouth. A physician was summoned at once, and arrived ten minutes later. He informed the Board that, in his opinion, death had taken place several hours before, as the body was rigid. The deceased was a very healthy, strong girl. Although she had been directed by the family in regard to lighting and turning off the gas, it was said that she did not appear to understand the working of the fixtures, and she probably turned on the gas after turning it off. The room measured in length eleven and one-half feet, width nine feet, and in height eight and one-half feet. It had one window, fitting tightly, and one door closed but not latched, leaving a crack at the side for a foot or more from the floor. This door led into an entry about four by five feet, the door from which was shut closely. The gas fixture had been tightened after the accident, and before the Board visited the premises. From a test of the burner made with coal gas, it would pass about seven feet of water gas per hour.

Julia Crehan, age twenty-three, in the employ of Dr. P. N. Roy as a domestic, retired to her room in house No. 132 Main Street.

Charlestown, about 9.30 o'clock P.M., September 24, 1889. The next morning, about seven o'clock, the smell of gas being noticed, her room was entered, and she was found unconscious. The gas was escaping from an unlighted burner, which was wide open. The room contained 738 cubic feet. It had one window, fitting tightly, and a door, both closed. There was a space nearly half an inch wide under the door. She was at once taken to the Massachusetts General Hospital. When she arrived she was still unconscious, the odor of gas in her breath, pulse scarcely perceptible, temperature 104° . Atropia and brandy injected in arm; given fresh air. In the afternoon her breathing ceased once entirely. Artificial respiration applied; chest douched with cold water; oxygen gas administered every half hour. Vomited in the night. Next day pulse 150 to 165, temperature 103° to 104° , respiration 60. Given brandy in arm, and nutritive injections. She continued unconscious till the evening of September 27. The 28th, 29th and 30th she was conscious; took strong coffee, brandy and milk, and other nourishment. October 2 she became delirious and weaker; was treated to stimulants in various forms; but she gradually failed, and died October 5. She is said by Dr. Roy to have been a healthy, strong girl.

The superintendent of the gas company reports that only coal gas had been made for several days before the accident occurred.

A subsequent test of the burner used in the room showed that slightly over seven cubic feet of gas would pass through it per hour.

The above sketch of the treatment is meagre. The hospital record of the case was kept each day, with great detail, showing that the patient received the most careful attention. The autopsy showed indications of tuberculosis.

Frank Foster, age thirty-two, was killed at Gloucester about six P.M., Nov. 20, 1888, according to the report of the manager of the Gloucester Electric Company, by contact with the electric current supplied on the arc circuit of that company. He reached up outside a window to close the "cut-off" box, using an iron fish gaff or hook. A contact was made in some way with the current, and he fell back on the floor. It was some fifteen minutes before he ceased to breathe. The floor was wet. The wires show no abrasion, no bare wire was noticeable outside the box, and there was no trace of burning. The

shock was instantaneous; as he fell back on the floor he started to get up, and then fell back again. The gaff or hook fell on the floor. It was sharp pointed, with iron ring handle, and wet with use. The Board visited the premises a few days after the occurrence, and learned, from eye-witnesses of the accident and inspection of the premises, that the above report was correct. The cut-off worked hard. It had been put up five weeks before. Foster had tried to turn it with his hand, and, failing, took the hook. He had on rubber boots with outside soles tacked on by nails, some of which passed entirely through the bottom of the boot. In reaching up through the top of the window to the cut-off, he doubtless took hold of the window frame with his left hand. He did not speak after he first fell, and it was said there was no indication of pain in his face. A physician was called, and also the medical examiner, who thought an inquest unnecessary.

CASES PENDING BEFORE THE BOARD, DEC. 31, 1889.

Petitions for authority to furnish electric light by the gas companies in Adams, North Adams, and by the Lawrence Gas Company in Methuen.

Appeal of the Lawrence Gas Company from the decision of the selectmen of Methuen, giving Geo. H. Drew and others consent to lay gas pipes in the streets.

Appeal of the Chelsea Gas Light Company from the permission of the mayor and aldermen of Chelsea, granting the American Fuel Company the right to lay gas pipes in certain streets.

Application of F. M. Gilley to be supplied with electric light by the Chelsea Gas Light Company.

Petitions for license to make water gas by the gas companies in Spencer, Amesbury, Athol, South Boston, Roxbury, Cottage City and Brockton.

Appeal of the Braintree Electric Company from the consent of the selectmen of Braintree, allowing A. S. Morrison & Brothers and others to run wires over certain streets.

Appeal of the Randolph and Holbrook Electric Company from the decision of the selectmen of Randolph, permitting the Randolph and Holbrook Light and Power Company to erect poles in the streets.

Appeal of Edward H. Galligan and others from the same.

Appeal of the Malden and Melrose Gas Light Company from the decision of the selectmen of Melrose, allowing Geo. W. Chipman and others permission to lay gas pipes in the streets.

Respectfully submitted,

ABRAHAM B. COFFIN,
EDWARD T. ROWELL,
FORREST E. BARKER,

Board of Gas and Electric Light Commissioners.

Boston, Jan. 1, 1890.

APPENDICES.

APPENDIX A.

GAS COMPANIES' BALANCE SHEETS AND PROFIT AND LOSS ACCOUNTS, JUNE 30, 1889.

[From the returns made as corrected by the Board.]

ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$21,214 97
Machinery and manufacturing appliances, }	
Street mains, }	6,002 05
Cash on hand,	2,012 77
Due for gas,	751 89
Other accounts due the company,	5,727 95
Coal on hand,	346 81
Coke on hand,	32 00
Office furniture,	200 00
Notes receivable,	1,000 00
Lungren lamps,	32 90
Total assets, as per books of the company,	\$37,321 34

LIABILITIES.

Capital stock,	\$17,300 00
Unpaid bills,	8 45
Total liabilities, as per books of the company,	\$17,308 45
Profit and loss balance,	20,012 89
	\$37,321 34

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$19,929 31
Balance of gas manufacturing account,		5,405 19
Interest received,		2 51
Rents,		68 38
Dividends declared,	\$3,460 00	
Other items,	1,932 50	
Balance June 30, 1889,	20,012 89	
	\$25,405 39	\$25,405 39

AMESBURY AND SALISBURY GAS COMPANY.

ASSETS.

Real estate,	\$4,875 98
Machinery and manufacturing appliances,	40,255 50
Street mains,	16,250 00
Meters,	1,498 39
Cash on hand,	126 47
Due for gas,	413 67
Coal on hand,	854 24
Enrichers on hand,	161 94
Purifying materials on hand,	10 00
Other materials on hand,	500 00

Total assets, as per books of the company, . . . \$64,946 19

LIABILITIES.

Capital stock,	\$60,000 00
Unpaid bills,	1,702 24

Total liabilities, as per books of the company, . . . \$61,702 24

Profit and loss balance, 3,243 95

\$64,946 19

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$3,043 57
Balance of gas manufacturing account,		1,851 34
Interest paid,	\$34 74	
Construction charged off,	1,616 22	
Balance June 30, 1889,	3,243 95	
	<u>\$4,895 91</u>	<u>\$4,895 91</u>

AMHERST GAS COMPANY.

ASSETS.

Real estate,	\$635 85
Machinery and manufacturing appliances,	8,079 49
Street mains,	6,530 97
Meters,	1,059 56
Cash on hand,	167 34
Due for gas,	1,290 74
Other accounts due the company,	3 00
Coke on hand,	14 25
Enrichers on hand,	87 40
Other materials on hand,	34 74
Total assets, as per books of the company,	<u>\$17,903 34</u>

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	1,000 00
Unpaid bills,	54 71
Total liabilities, as per books of the company,	<u>\$11,054 71</u>
Profit and loss balance,	6,848 63
	<u>\$17,903 34</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$5,796 70
Balance of gas manufacturing account,		1,964 13
Interest paid,	\$76 11	
Dividends declared,	800 00	
Other items,	36 09	
Balance June 30, 1889,	6,848 63	
	<u>\$7,760 83</u>	<u>\$7,760 83</u>

ARLINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,000 00
Machinery and manufacturing appliances,	35,000 00
Street mains,	34,000 00
Cash on hand,	1,576 30
Due for gas,	2,869 83
Coal on hand,	2,246 70
Total assets, as per books of the company,	<u>\$76,692 83</u>

LIABILITIES.

Capital stock,	\$70,000 00
Unpaid dividends,	996 00
Total liabilities, as per books of the company,	<u>\$70,996 00</u>
Profit and loss balance,	5,696 83
	<u>\$76,692 83</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$8,535 10
Balance of gas manufacturing account,		4,903 35
Dividends declared,	\$4,200 00	
Construction charged off,	3,541 62	
Balance June 30, 1889,	5,696 83	
	<u>\$13,438 45</u>	<u>\$13,438 45</u>

ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$12,115 88
Machinery and manufacturing appliances,	24,322 43
Street mains,	9,690 36
Meters,	1,680 88
Cash on hand,	603 81
Due for gas,	1,449 77
Other accounts due the company,	62 90
Coal on hand,	343 00
Coke on hand,	64 00
Tar on hand,	120 00
Purifying materials on hand,	4 80
Other materials on hand,	549 11
Stoves on hand,	210 28
Office furniture,	131 20
Total assets, as per books of the company,	<u>\$51,348 42</u>

LIABILITIES.

Capital stock,	\$46,400 00
Notes payable,	1,500 00
Total liabilities, as per books of the company,	<u>\$47,900 00</u>
Profit and loss balance,	3,448 42
	<u>\$51,348 42</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$13,138 90
Balance of gas manufacturing account,		5,042 06
Other items of income,		109 04
Interest paid,	\$222 98	
Dividends declared,	2,784 00	
Construction charged off,	234 60	
Share dividend,	11,600 00	
Balance June 30, 1889,	3,448 42	
	<u>\$18,290 00</u>	<u>\$18,290 00</u>

BAY STATE GAS COMPANY.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			\$4,950,000 00
Street mains,			
Works improvements,			116 20
Cash on hand,			201 12
Due for gas,			1,533 00
Gas on hand,			1,495 30
Coal on hand,			5,166 87
Enrichers on hand,			4,969 75
Other materials on hand,			1,282 00
Horses, wagons, etc.,			790 50
Notes receivable,			9,000 00
Total assets, as per books of the company,			<u>\$4,974,554 74</u>
Profit and loss balance,			43,923 38
			<u>\$5,018,478 12</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	4,512,000 00
Amounts due from the company, not included above,	6,478 12
Total liabilities, as per books of the company,	<u>\$5,018,478 12</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,	\$30,074 36	
Balance of gas manufacturing account,	13,399 44	
Rents,		\$42 49
Interest paid,	492 07	
Balance June 30, 1889,		43,929 38
	<u>\$43,965 87</u>	<u>\$43,965 87</u>

BEVERLY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$23,000 00
Machinery and manufacturing appliances,	8,703 53
Street mains,	15,442 14
Meters,	3,446 90
Cash on hand,	1,471 94
Due for gas,	3,012 52
Other accounts due the company,	1,161 48
Coal on hand,	400 00
Tar on hand,	6 00
Enrichers on hand,	17 50
Other materials on hand,	108 00
Stoves on hand,	171 82
Fixtures on hand,	524 81
Office furniture,	253 67
Electric light plant,	19,261 16
Total assets, as per books of the company,	<u>\$76,981 47</u>

LIABILITIES.

Capital stock,	\$50,000 00
Special stock,	11,800 00
Notes payable,	6,000 00
Unpaid bills,	365 13
Total liabilities, as per books of the company,	<u>\$68,165 13</u>
Profit and loss balance,	8,816 34
	<u>\$76,981 47</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$3,585 20
Balance of gas manufacturing account,		7,004 02
Balance of electric light manufacturing account,		2,388 28
Rents,		98 50
Interest paid,	\$925 96	
Dividends declared,	3,450 00	
Other items,	13 86	130 16
Balance June 30, 1889,	8,816 34	
	<u>\$13,206 16</u>	<u>\$13,206 16</u>

BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,358,869 26
Machinery and manufacturing appliances,	900,000 00
Street mains,	215,000 00
Meters,	5,000 00
Cash on hand,	171,696 54
Due for gas,	176,857 47
Other accounts due the company,	12,519 56
Coal on hand,	123,209 76
Coke on hand,	13,125 00
Tar on hand,	3,074 16
Ammoniacal liquor on hand,	976 26
Gas on hand,	2,097 76
Enrichers on hand,	10,814 60
Purifying materials on hand,	1,115 60
Other materials on hand,	24,632 25
Total assets, as per books of the company,	<u>\$3,018,988 22</u>

LIABILITIES.

Capital stock,	\$2,500,000 00
Unpaid bills,	24,184 50
Deposits,	15,654 54
Contingent fund,	331,925 77
Amounts due from the company not included above,	11,827 35
Total liabilities, as per books of the company,	<u>\$2,883,592 16</u>
Profit and loss balance,	135,396 06
	<u>\$3,018,988 22</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$169,283 02
Balance of gas manufacturing account,		493,151 80
Interest received,		4,712 58
Other items of income,		1,741 99
Dividends declared,	\$267,800 00	
Construction charged off,	111,443 12	
Depreciation,	150,000 00	
Other items,	4,250 21	
Balance June 30, 1889,	135,396 06	
	<u>\$668,889 39</u>	<u>\$668,889 39</u>

BROCKTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$49,000 00
Machinery and manufacturing appliances, }	
Street mains, }	59,171 74
Meters, }	
Cash on hand,	2,562 56
Coal on hand,	365 36
Other materials on hand,	94 13
Stoves on hand,	401 91

Total assets, as per books of the company, . . . \$111,595 70

LIABILITIES.

Capital stock,	\$64,000 00
Bonds issued,	35,000 00

Total liabilities, as per books of the company, . . . \$99,000 00

Profit and loss balance, 12,595 70

\$111,595 70

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$12,702 52
Rents,		6,580 00
Interest paid,	\$1,987 00	
Dividends declared,	4,480 00	
Other items,	219 82	
Balance June 30, 1889,	12,595 70	
	<u>\$19,282 52</u>	<u>\$19,282 52</u>

BROOKLINE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$213,720 38
Machinery and manufacturing appliances,	144,756 75
Street mains,	42,961 35
Meters,	11,913 30
Cash on hand,	8,379 29
Due for gas,	18,603 86
Other accounts due the company,	3,681 68
Coal on hand,	10,053 75
Coke on hand,	687 50
Tar on hand,	135 00
Enrichers on hand,	1,498 50
Purifying materials on hand,	190 00
Other materials on hand,	7,171 30
Horses, wagons, etc.,	1,945 00
Office furniture,	500 00
Electric plant,	98,134 51
Total assets, as per books of the company,	<u>\$564,332 17</u>

LIABILITIES.

Capital stock,	\$450,000 00
Notes payable,	83,000 00
Unpaid bills,	2,120 15
Deposits,	225 00
Total liabilities, as per books of the company,	<u>\$535,345 15</u>
Profit and loss balance,	28,987 02
	<u>\$564,332 17</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$24,347 22
Balance of gas manufacturing account,		42,157 69
Balance of electric light manufacturing account,		7,093 91
Rents,		222 98
Other items of income,		1,189 09
Interest paid,	\$3,345 56	
Dividends declared,	27,000 00	
Construction charged off,	15,384 54	
Other items,	292 77	
Balance June 30, 1889,	28,987 02	
	<u>\$75,009 89</u>	<u>\$75,009 89</u>

CAMBRIDGE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$64,767 66
Machinery and manufacturing appliances,	664,988 58
New holder,	65,045 12
Main pipe on hand,	3,082 06
Cash on hand,	41,746 80
Due for gas,	34,663 61
Other accounts due the company,	2,103 12
Coal on hand,	8,715 80
Coke on hand,	540 00
Tar on hand,	108 00
Other materials on hand,	1,665 50
Lungren lamps,	4,257 50
Supplies on hand,	1,269 70
Supply bills,	1,177 81
Notes receivable,	9,103 59

Total assets, as per books of the company, . . . \$903,234 85

LIABILITIES.

Capital stock,	\$700,000 00
Deposits,	1,285 00
Unpaid dividends,	50 00
Amounts due from the company, not included above,	124 35

Total liabilities, as per books of the company, . . . \$701,459 35

Profit and loss balance, 201,775 50

\$903,234 85

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$183,741 09
Balance of gas manufacturing account,		86,585 39
Interest received,		641 90
Rents,		758 81
Other items of income,		48 31
Dividends declared,	\$70,000 00	
Balance June 30, 1889,	201,775 50	
	<u>\$271,775 50</u>	<u>\$271,775 50</u>

CHARLESTOWN GAS COMPANY.

ASSETS.

Real estate, }	
Machinery and manufacturing appliances, }	\$538,397 14
Street mains,	3,153 16
Cash on hand,	3,587 79
Due for gas,	17,152 78
Other accounts due the company,	3,156 60
Coal on hand,	2,144 47
Enrichers on hand,	138 04
Investments,	24,211 25
Total assets, as per books of the company,	\$591,941 23

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	5,000 00
Unpaid bills,	1,970 60
Deposits,	514 50
Reserved fund,	37,438 34
Suspense account,	501 63
Total liabilities, as per books of the company,	\$545,425 07
Profit and loss balance,	46,516 16
	\$591,941 23

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$39,381 10
Balance of gas manufacturing account,		52,011 84
Balance of electric light manufacturing account,		7,863 80
Rents,		240 00
Other items of income,		344 06
Interest paid,	\$1,126 86	
Dividends declared,	50,000 00	
Depreciation,	2,197 78	
Balance June 30, 1889,	46,516 16	
	\$99,840 80	\$99,840 80

CHELSEA GAS LIGHT COMPANY.

ASSETS

Real estate,	\$161,822 79
Machinery and manufacturing appliances, }	
Street mains, }	150,000 00
Meters, }	
Cash on hand,	26,819 66
Due for gas,	9,549 84
Other accounts due the company,	384 50
Coal on hand,	1,123 35
Stoves on hand,	395 76
Investments (loan to electric account,)	26,271 88
Total assets, as per books of the company,	\$376,367 78

LIABILITIES.

Capital stock,	\$300,000 00
Notes payable,	30,000 00
Deposits,	890 00
Total liabilities, as per books of the company,	\$330,890 00
Profit and loss balance,	45,477 78
	\$376,367 78

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$38,642 91
Balance of gas manufacturing account,		24,942 67
Balance of electric light manufacturing account,		1,038 41
Rents,		200 00
Other items of income,		704 33
Interest paid,	\$1,310 32	
Dividends declared,	18,000 00	
Other items,	740 22	
Balance June 30, 1889,	45,477 78	
	\$65,528 32	\$65,528 32

CHICOPEE GAS WORKS.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			356 50
Due for gas,			31 61
Other accounts due the company,			78 75
Coal on hand,			550 00
Coke on hand,			45 00
Enrichers on hand,			12 50
Purifying materials on hand,			60 00
Notes receivable,			18,380 00
Investments,			10,000 00
Total assets, as per books of the company,			<u>\$59,514 36</u>

LIABILITIES.

Capital stock,	\$30,000 00
Total liabilities, as per books of the company,	<u>\$30,000 00</u>
Profit and loss balance,	29,514 36
	<u>\$59,514 36</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$36,269 90
Balance of gas manufacturing account,		1,034 29
Interest received,		830 24
Dividends declared,	\$3,600 00	
Construction charged off,	5,620 07	
Balance June 30, 1889,	29,514 36	
	<u>\$38,134 43</u>	<u>\$38,134 43</u>

CITIZENS' GAS LIGHT COMPANY OF QUINCY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	8,500 00
Street mains,	10,000 00
Meters,	500 00
Cash on hand,	312 62
Due for gas,	837 80
Coal on hand,	2,719 60
Coke on hand,	45 00
Tar on hand,	45 00
Enrichers on hand,	40 00
Purifying materials on hand,	50 00
Other materials on hand,	25 00
Stoves on hand,	350 00
Fixtures on hand,	750 00
Horses, wagons, etc.,	150 00
Office furniture,	100 00
<hr/>	
Total assets, as per books of the company,	\$33,925 02
Profit and loss balance,	12,330 04
<hr/>	
	\$46,255 06

LIABILITIES.

Capital stock,	\$33,000 00
Notes payable,	12,500 00
Unpaid bills,	755 06
<hr/>	
Total liabilities, as per books of the company,	\$46,255 06

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$839 34
Balance of gas manufacturing account,		3,443 18
Rents,		144 00
Other items of income,		2,341 30
Interest paid,	\$650 00	
Dividends declared,	1,980 00	
Depreciation,	16,467 86	
Balance June 30, 1889,		12,330 04
<hr/>		
	\$19,097 86	\$19,097 86

CITIZENS' GAS LIGHT COMPANY (WAKEFIELD).

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		\$95,300 00
Street mains,		
Cash on hand,		3,463 51
Due for gas,		2,757 47
Coal on hand,		53 00
Coke on hand,		75 00
Tar on hand,		276 00
Purifying materials on hand,		17 04
Total assets, as per books of the company,		<u>\$101,942 02</u>

LIABILITIES.

Capital stock,	\$95,300 00
Unpaid dividends,	253 00
Total liabilities, as per books of the company,	<u>\$95,553 00</u>
Profit and loss balance,	6,389 02
	<u>\$101,942 02</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$7,779 05
Balance of gas manufacturing account,		515 97
Dividends declared,	\$1,906 00	
Balance June 30, 1889,	6,389 02	
	<u>\$8,295 02</u>	<u>\$8,295 02</u>

CLINTON GAS LIGHT COMPANY.

ASSETS.

Real estate, }	
Machinery and manufacturing appliances, }	\$27,000 00
Street mains,	9,000 00
Meters,	500 00
Cash on hand,	902 86
Coal on hand,	2,364 23
Coke on hand,	170 00
Tar on hand,	50 00
Enrichers on hand,	18 00
Purifying materials on hand,	100 00
Other materials on hand,	685 69
Office furniture,	200 00
Electric light plant,	14,630 00
Total assets, as per books of the company,	<u>\$55,620 78</u>

LIABILITIES.

Capital stock,	\$35,000 00
Notes payable,	15,000 00
Profit and loss, electric light,	347 07
Total liabilities, as per books of the company,	<u>\$50,347 07</u>
Profit and loss balance,	5,273 71
	<u>\$55,620 78</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$7,192 42
Balance of gas manufacturing account,		1,053 57
Interest paid,	\$30 75	
Dividends declared,	1,050 00	
Depreciation,	1,891 53	
Balance June 30, 1889,	5,273 71	
	<u>\$8,245 99</u>	<u>\$8,245 99</u>

DANVERS GAS LIGHT COMPANY.

ASSETS.

Real estate,		
Machinery and manufacturing appliances, }		\$20,495 50
Street mains,		
Meters,		204 23
Cash on hand,		11 67
Due for gas,		266 04
Coal on hand,		887 76
Tar on hand,		36 00
Stoves on hand,		44 80
Total assets, as per books of the company, . . .		\$21,946 00
Profit and loss balance,		800 79
		<u>\$22,746 79</u>

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	.	\$20,000	00
Notes payable,	.	.	.	.	.	.	.	.	.	.	2,000	00
Unpaid bills,	.	.	.	.	.	.	.	.	.	.	746	79
Total liabilities, as per books of the company,											.	<u>\$22,746</u>	79

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,	\$1,168 06	
Balance of gas manufacturing account, . . .		\$450 80
Other items of income,		64 05
Interest paid,	147 58	
Balance June 30, 1889,		800 79
	<u>\$1,315 64</u>	<u>\$1,315 64</u>

DEDHAM AND HYDE PARK GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$3,009 05
Machinery and manufacturing appliances,	12,863 72
Street mains,	20,212 01
Meters,	1,492 51
Cash on hand,	1,617 83
Due for gas,	1,006 89
Other accounts due the company,	162 09
Coal on hand,	569 77
Coke on hand,	66 80
Tar on hand,	164 40
Enrichers on hand,	4 00
Other materials on hand,	50 00
Stoves on hand,	2,101 22
Fixtures on hand,	
Gas engine,	
Horses, wagons, etc.,	340 00
Office furniture,	161 50

Total assets, as per books of the company,	\$48,821 79
Profit and loss balance,	60,641 30

\$109,463 09

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	9,000 00
Unpaid bills,	463 09

Total liabilities, as per books of the company,	\$109,463 09
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,	\$61,757 77	
Balance of gas manufacturing account,		\$5,129 61
Rents,		84 00
Other items of income,		39 22
Interest paid,	467 79	
Dividends declared,	2,500 00	
Construction charged off,	671 28	
Depreciation,	101 53	
Other items,	395 76	
Balance June 30, 1889,		60,641 30
	<u>\$65,894 13</u>	<u>\$65,894 13</u>

DORCHESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		\$464,090 40
Meters,		6,346 11
Cash on hand,		50,632 67
Due for gas,		13,334 56
Other accounts due the company,		900 02
Coal on hand,		7,796 18
Coke on hand,		93 61
Enrichers on hand,		697 52
Purifying materials on hand,		344 00
Other materials on hand,		5,528 07
Lungren lamps on hand,		149 38
Total assets, as per books of the company,		<u>\$549,912 52</u>

LIABILITIES.

Capital stock,	\$400,000 00
Deposits,	80 00
Amounts due from the company, not included above,	<u>2,169 50</u>
Total liabilities, as per books of the company,	\$402,249 50
Profit and loss balance,	<u>147,663 02</u>
	<u>\$549,912 52</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$135,446 82
Balance of gas manufacturing account,		45,230 63
Interest received,		1,891 39
Rents,		242 00
Other items of income,		852 18
Dividends declared,	\$36,000 00	
Balance June 30, 1889,	147,663 02	
	<u>\$183,663 02</u>	<u>\$183,663 02</u>

EAST BOSTON GAS COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$225,011 74
Machinery and manufacturing appliances,			
Cash on hand,			18,769 75
Due for gas,			5,300 35
Other accounts due the company,			32 14
Coal on hand,			3,865 43
Purifying materials on hand,			150 65
Other materials on hand,			2,058 19
Investments,			36,000 00
Total assets, as per books of the company,			\$291,188 25

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	.	\$220,000	00
Unpaid dividends,	.	.	.	.	.	.	.	.	.	.	11,000	00
												<hr/>	
Total liabilities, as per books of the company,	.	.	.	.	.	.	.	.	.	.	\$231,000	00
Profit and loss balance,	.	.	.	.	.	.	.	.	.	.	60,188	25
												<hr/>	
												\$291,188	25

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$58,351 27
Balance of gas manufacturing account,		21,698 21
Interest account,		2,323 62
Other items of income,		75 15
Dividends declared,	\$22,000 00	
Other items,	260 00	
Balance June 30, 1889,	60,188 25	
		\$82,448 25
		\$82,448 25

EASTHAMPTON GAS COMPANY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	10,500 00
Street mains,	8,000 00
Meters,	500 00
Cash on hand,	443 93
Due for gas,	561 13
Coal on hand,	508 25
Tar on hand,	75 00
Enrichers on hand,	53 50
Purifying materials on hand,	6 00
Other materials on hand,	68 40
Notes receivable,	4,500 00
Total assets, as per books of the company,	<u>\$34,716 21</u>

LIABILITIES.

Capital stock,	\$30,000 00
Unpaid bills,	405 76
Total liabilities, as per books of the company,	<u>\$30,405 76</u>
Profit and loss balance,	4,310 45
	<u>\$34,716 21</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$1,397 24
Balance of gas manufacturing account,		2,485 16
Interest received,		160 13
Rents,		50 00
Dividends declared,	\$2,700 00	
Other items,	82 08	
Balance June 30, 1889,	4,310 45	
	<u>\$7,092 53</u>	<u>\$7,092 53</u>

FALL RIVER GAS WORKS COMPANY.

ASSETS.

Real estate,	\$135,169 97
Machinery and manufacturing appliances,	35,000 00
Extension of works,	29,809 05
Street mains,	75,000 00
Extension of mains,	9,134 81
Meters,	16,475 83
New services,	4,670 73
Cash on hand,	3,327 35
Due for gas,	3,486 71
Other accounts due the company,	2,743 92
Coal on hand,	3,821 81
Coke on hand,	77 00
Tar on hand,	547 97
Enrichers on hand,	393 46
Purifying materials on hand,	409 92
Gas on hand,	94 85
Stoves on hand,	1,248 47
Fixtures on hand, burners,	1,080 38
Tool wagons,	86 47
Office furniture,	403 96
Tools,	568 77
Improvements to repair shop, and additions,	2,101 58
Total assets, as per books of the company,	<u>\$325,652 94</u>

LIABILITIES.

Capital stock,	\$288,000 00
Unpaid bills,	5,349 07
Deposits,	153 00
Total liabilities, as per books of the company,	<u>\$293,502 07</u>
Profit and loss balance,	32,150 87
	<u>\$325,652 94</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$29,308 77
Balance of gas manufacturing account,		27,884 83
Interest received,		92 55
Rents,		770 37
Other items of income,		25 55
Dividends declared,	\$25,920 00	
Other items,	11 20	
Balance June 30, 1889,	32,150 87	
	<u>\$58,082 07</u>	<u>\$58,082 07</u>

FITCHBURG GAS COMPANY.

ASSETS.

Real estate,	\$8,500 00
Machinery and manufacturing appliances,	17,659 87
Street mains,	10,268 83
Meters,	5,000 00
Cash on hand,	2,964 87
Due for gas,	2,390 60
Other accounts due the company,	1,591 61
Coal on hand,	762 20
Enrichers on hand,	189 00
Stoves on hand,	130 00
Fixtures on hand,	147 35
Notes receivable,	12,685 00
Water works,	8,184 24
Total assets, as per books of the company,	<u>\$70,473 57</u>

LIABILITIES.

Capital stock,	\$60,000 00
Total liabilities, as per books of the company,	<u>\$60,000 00</u>
Profit and loss balance,	10,473 57
	<u>\$70,473 57</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$6,061 57
Balance of gas manufacturing account,		9,031 92
Interest received,		413 00
Rents,		962 07
Other items of income,		5 01
Dividends declared,	\$6,000 00	
Balance June 30, 1889,	10,473 57	
	<u>\$16,473 57</u>	<u>\$16,473 57</u>

GARDNER GAS COMPANY.

ASSETS.

Real estate,	\$8,500 00
Machinery and manufacturing appliances,	7,500 00
Street mains,	28,175 00
Meters,	1,150 00
Cash on hand,	87 23
Due for gas,	517 75
Fuel on hand,	28 00
Enrichers on hand,	334 57
Stoves on hand,	10 00
Fixtures on hand,	350 00
Horses, wagons, etc.,	475 00
Office furniture,	100 00
Total assets, as per books of the company,	<u>\$47,227 55</u>

LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	12,500 00
Unpaid bills,	1,427 36
Total liabilities, as per books of the company,	<u>\$43,927 36</u>
Profit and loss balance,	3,300 19
	<u>\$47,227 55</u>

GLOUCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		3,578 73
Due for gas,		3,188 54
Other accounts due the company,		1,983 88
Coal on hand,		1,989 00
Coke on hand,		64 60
Tar on hand,		250 00
Purifying materials on hand,		90 00
Other materials on hand,		515 00
Stoves on hand,		150 00
Fixtures on hand,		500 00
Office furniture,		150 00
Notes receivable,		153 80
Investments,		13,300 00
Total assets, as per books of the company,		<u>\$93,363 55</u>

LIABILITIES.

Capital stock,	<u>\$62,300 00</u>
Total liabilities, as per books of the company,	<u>\$62,300 00</u>
Profit and loss balance,	31,063 55
	<u>\$93,363 55</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$26,082 34
Balance of gas manufacturing account,		9,183 16
Interest received,		843 39
Rents,		2,328 04
Other items of income,		927 09
Dividends declared,	\$7,476 00	
Depreciation,	824 67	
Balance June 30, 1889,	31,063 55	
	<u>\$39,364 22</u>	<u>\$39,364 22</u>

GREENFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$44,536 61
Machinery and manufacturing appliances,			
Street mains,			4,199 04
Meters,			1,353 48
Cash on hand,			23 02
Due for gas,			579 55
Other accounts due the company,			33 91
Coal on hand,			201 46
Coke on hand,			11 20
Tar on hand,			62 50
Purifying materials on hand,			122 10
Other materials on hand,			48 50
Fixtures on hand,			127 38

Total assets, as per books of the company,	\$51,298 75
Profit and loss balance,	1,574 22
	<u>\$52,872 97</u>

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	1,200 00
Unpaid bills,	463 16
Amounts due from the company, not included above,	1,209 81
	<u>\$52,872 97</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,	\$913 25	
Balance of gas manufacturing account,		\$1,423 70
Interest paid,	42 71	
Dividends declared,	2,040 00	
Other items,	1 96	
Balance June 30, 1889,		1,574 22
	<u>\$2,997 92</u>	<u>\$2,997 92</u>

HAVERHILL GAS LIGHT COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$120,705 27
Machinery and manufacturing appliances,			
Street mains,			10,231 27
Meters,			3,072 30
Cash on hand,			2,420 05
Due for gas,			4,922 83
Other accounts due the company,			785 32
Coal on hand,			2,379 87
Coke on hand,			410 56
Tar on hand,			1,330 00
Enrichers on hand,			40 97
Purifying materials on hand,			360 00
Lungren lamps on hand,			2,693 80
Investments,			18,400 00
Total assets, as per books of the company,			\$167,752 24

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	\$75,000	00
Notes payable,	.	.	.	.	.	.	.	.	.	37,500	00
Unpaid bills,	.	.	.	.	.	.	.	.	.	3,918	95
Total liabilities, as per books of the company,	.	.	.	.	.	.	.	.	.	\$116,418	95
Profit and loss balance,	.	.	.	.	.	.	.	.	.	51,333	29
											\$167,752	24

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$35,638 43
Balance of gas manufacturing account,		25,088 24
Rents,		528 00
Interest paid,	\$2,371 38	
Dividends declared,	7,500 00	
Balance June 30, 1889,	51,333 29	
	\$61,204 67	\$61,204 67

IPSWICH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,400 00
Machinery and manufacturing appliances,	2,000 00
Street mains,	5,200 00
Meters,	1,800 00
Cash on hand,	339 18
Due for gas,	334 67
Coal on hand,	70 00
<hr/>	
Total assets, as per books of the company,	\$13,143 85
Profit and loss balance,	13,925 20
<hr/>	
	\$27,069 05

LIABILITIES.

Capital stock,	\$16,000 00
Bonds issued,	7,700 00
Notes payable,	1,483 43
Unpaid bills,	1,643 62
Interest due, but not paid,	242 00
<hr/>	
Total liabilities, as per books of the company,	\$27,069 05

JAMAICA PLAIN GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Cash on hand,		9,238 74
Other accounts due the company,		1,075 00
Coal on hand,		3,076 69
Coke on hand,		1,500 00
Tar on hand,		75 00
Enrichers on hand,		234 00
Other materials on hand,		3,728 36
Total assets, as per books of the company,		\$284,348 04

LIABILITIES.

Capital stock,	\$200,000 00
Notes payable,	32,500 00
Deposits,	158 00
Total liabilities, as per books of the company,	\$232,658 00
Profit and loss balance,	51,690 04
	\$284,348 04

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$45,283 13
Balance of gas manufacturing account,		23,216 13
Other items of income,		1,931 60
Interest paid,	\$2,162 74	
Dividends declared,	16,000 00	
Other items,	578 08	
Balance June 30, 1889,	51,690 04	
	\$70,430 86	\$70,430 86

LAWRENCE GAS COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Construction account, new work,		35,991 72
Cash on hand,		15,025 00
Due for gas,		8,025 39
Other accounts due the company,		729 59
Coal on hand,		11,135 14
Coke on hand,		1,490 00
Tar on hand,		2,150 00
Enrichers on hand,		291 78
Purifying materials on hand,		769 00
Other materials on hand,		8,629 07
Stoves on hand,		439 28
Fixtures on hand,		6,744 04
Gas on hand,		372 60
Aqua ammonia on hand,		1,860 21
Electric construction,		51,543 35
Electric supplies,		1,953 12
Total assets, as per books of the company,		\$547,149 29

LIABILITIES.

Capital stock,	\$475,000 00
Notes payable,	15,000 00
Deposits,	24 00
Reserved fund, premium new stock,	21,600 00
Total liabilities, as per books of the company,	\$511,624 00
Profit and loss balance,	35,525 29
	\$547,149 29

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$34,814 61
Balance of gas manufacturing account,		32,694 08
Balance of electric light manufacturing account,		3,717 75
Rents,		968 46
Other items of income,		568 95
Interest paid,	\$2,778 42	
Dividends declared,	34,000 00	
Other items,	460 14	
Balance June 30, 1889,	35,525 29	
	\$72,763 85	\$7,276 385

LEOMINSTER GAS LIGHT COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$48,054 47
Machinery and manufacturing appliances,			
Street mains,			
Meters,			1,945 53
Cash on hand,			1,734 34
Due for gas,			382 35
Other accounts due the company,			8 36
Enrichers on hand,			112 00
Meter rent due,			22 00

Total assets, as per books of the company, . . . \$52,259 05

LIABILITIES.

[illegible]

Total liabilities, as per books of the company, . . . \$51,049 10

Profit and loss balance,	1,209 95
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\$52,259 05

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$702 31
Balance of gas manufacturing account,		2,843 90
Rents,		19 50
Other items of income,		11 90
Dividends declared,	\$2,250 00	
Construction charged off,	68 56	
Other items,	49 10	
Balance June 30, 1889,	1,209 95	
	<hr/>	<hr/>
	\$3,577 61	\$3,577 61

LEXINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,514 95
Machinery and manufacturing appliances,	21,523 73
Street mains,	6,625 44
Meters,	554 01
Cash on hand,	382 94
Due for gas,	707 15
Other accounts due the company,	3 00
Tar on hand,	11 00
Enrichers on hand,	32 75
Notes receivable,	546 00

Total assets, as per books of the company,	<u>\$31,900 97</u>
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LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	1,672 30
Unpaid bills,	221 87
Interest due, but not paid,	23 61
Depreciation fund,	152 82

Total liabilities, as per books of the company,	<u>\$22,070 60</u>
Profit and loss balance,	9,830 37

<u>\$31,900 97</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$8,712 64
Balance of gas manufacturing account,		1,396 60
Interest received,		4 95
Rents,		10 00
Interest paid,	\$141 00	
Depreciation fund,	152 82	
Balance June 30, 1889,	9,830 37	
	<u>\$10,124 19</u>	<u>\$10,124 19</u>

LOWELL GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			3,458 67
Coal on hand,			12,775 46
Coke on hand,			420 00
Purifying materials on hand,			225 00
Stoves on hand,			10,000 00
Investments,			75,000 00
Total assets, as per books of the company,			<u>\$526,879 13</u>

LIABILITIES.

Capital stock,	\$500,000 00
Total liabilities, as per books of the company,	
Profit and loss balance,	26,879 13
	<u>\$526,879 13</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$24,957 01
Balance of gas manufacturing account,		70,374 00
Rents,		2,330 96
Interest paid,	\$1,597 78	
Dividends declared,	60,000 00	
Construction charged off,	7,861 55	
Depreciation,	1,323 51	
Balance June 30, 1889,	26,879 13	
	<u>\$97,661 97</u>	<u>\$97,661 97</u>

LYNN GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate,	\$180,000 00
Machinery and manufacturing appliances, }	
Street mains, }	120,000 00
Electric assets,	113,552 01
Cash on hand,	124 51
Due for gas,	16,442 37
Other accounts due the company,	698 15
Coal on hand,	4,506 14
Other materials on hand,	58 78
Stoves on hand,	48 68
Total assets, as per books of the company,	<u>\$435,430 64</u>

LIABILITIES.

Capital stock,	\$375,000 00
Unpaid bills,	2,477 62
Deposits,	54 27
Total liabilities, as per books of the company,	<u>\$377,531 89</u>
Profit and loss balance,	57,898 75
	<u>\$435,430 64</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$52,778 58
Balance of gas manufacturing account,		36,152 94
Balance of electric light manufacturing account,		14,129 98
Interest received,		139 96
Rents,		1,888 29
Other items of income,		500 00
Balance, electric account,		21,511 57
Dividends declared,	\$22,125 00	
Depreciation, electric plant,	46,577 57	
Other items,	500 00	
Balance June 30, 1889,	57,898 75	
	<u>\$127,101 32</u>	<u>\$127,101 32</u>

MALDEN AND MELROSE GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		2,947 50
Cash on hand,		19,264 20
Due for gas,		10,566 00
Other accounts due the company,		1,973 64
Coal on hand,		3,844 27
Coke on hand,		275 00
Tar on hand,		345 00
Fixtures on hand,		4,060 78
Pipes,		55 74
Oil barrels,		11 00
Total assets, as per books of the company,		<u>\$282,872 13</u>

LIABILITIES.

Capital stock,	\$220,000 00
Deposits,	5 00
Unpaid dividends,	922 50
Contingent fund,	12,625 00
Total liabilities, as per books of the company,	<u>\$233,552 50</u>
Profit and loss balance,	49,319 63
	<u>\$282,872 13</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$40,530 59
Balance of gas manufacturing account,		27,760 45
Rents,		189 50
Other items of income,		1,374 93
Interest paid,	\$4,770 60	
Dividends declared,	10,200 00	
Construction charged off,	4,686 70	
Other items,	878 54	
Balance June 30, 1889,	49,319 63	
	<u>\$69,855 47</u>	<u>\$69,855 47</u>

MANUFACTURERS' GAS LIGHT COMPANY (FALL RIVER).

ASSETS.

Real estate, . . . . .	}	. . . . .	\$49,804 99
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			2,301 60
Due for gas,			256 67
Coal on hand,			240 00
Coke on hand,			105 00
Enrichers on hand,			50 00
Stoves and lamps on hand,			107 85
Total assets, as per books of the company,			<u>\$52,866 11</u>

LIABILITIES.

Capital stock,	\$50,000 00
Total liabilities, as per books of the company,	\$50,000 00
Profit and loss balance,	2,866 11
	<u>\$52,866 11</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$1,809 35
Balance of gas manufacturing account,		5,967 01
Rents,		120 00
Interest paid,	\$30 25	
Dividends declared,	5,000 00	
Balance June 30, 1889,	2,866 11	
	<u>\$7,896 36</u>	<u>\$7,896 36</u>

MARBLEHEAD GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$5,521 55
Machinery and manufacturing appliances, }	
Street mains, }	24,367 75
Meters,	1,607 25
Cash on hand,	354 14
Due for gas,	365 02
Other accounts due the company,	86 23
Coal on hand,	39 00
Other materials on hand,	164 55
Stoves on hand,	50 00
Office furniture,	200 00
Investments,	106 25
Total assets, as per books of the company,	\$32,861 74
Profit and loss balance,	10,138 26
	<u>\$43,000 00</u>

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	3,000 00
Total liabilities, as per books of the company,	<u>\$43,000 00</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,	\$11,302 87	
Balance of gas manufacturing account,		\$1,923 53
Interest received,		2 50
Rents,		250 62
Other items of income,		148 41
Interest paid,	160 45	
Dividends declared,	1,000 00	
Balance June 30, 1889,		10,138 26
	<u>\$12,463 32</u>	<u>\$12,463 32</u>

MARLBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$5,590 00
Machinery and manufacturing appliances,	53,570 51
Street mains,	7,411 80
Meters,	1,124 00
Cash on hand,	2,468 57
Due for gas,	1,292 78
Other accounts due the company,	161 58
Coal on hand,	1,189 45
Tar on hand,	96 25
Purifying materials on hand,	36 00
Other materials on hand,	33 54
Stoves and fixtures on hand,	491 42
Total assets, as per books of the company,	<u>\$73,402 90</u>

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	370 15
Unpaid bills,	1,430 61
Total liabilities, as per books of the company,	<u>\$51,800 76</u>
Profit and loss balance,	21,602 14
	<u>\$73,402 90</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$19,230 05
Balance of gas manufacturing account,		2,590 17
Other items of income,		22 05
Interest paid,	\$6 74	
Other items,	233 39	
Balance June 30, 1889,	21,602 14	
	<u>\$21,842 27</u>	<u>\$21,842 27</u>

MIDDLEBOROUGH GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Due for gas,		218 30
Coal on hand,		200 00
Fuel on hand,		13 00
Enrichers on hand,		50 00
Fixtures and tools on hand,		50 00
Total assets, as per books of the company,		<u>\$30,881 54</u>

LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	816 63
Total liabilities, as per books of the company,	<u>\$30,816 63</u>
Profit and loss balance,	64 91
	<u>\$30,881 54</u>

MILFORD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,450 00
Machinery and manufacturing appliances,	60,152 00
Street mains,	30,382 01
Meters,	5,500 00
Cash on hand,	9,082 68
Due for gas,	1,094 29
Other accounts due the company,	284 16
Coal on hand,	4,163 40
Lamps on hand,	2,995 39
Tar on hand,	309 00
Other materials on hand,	506 93
Office furniture,	50 00
Construction,	298 08
Investments,	5,300 00
Total assets, as per books of the company,	<u>\$123,567 94</u>

LIABILITIES.

Capital stock,	\$80,000 00
Unpaid dividends,	4,000 00
Reserved fund,	4,700 00
Total liabilities, as per books of the company,	<u>\$89,300 00</u>
Profit and loss balance,	34,867 94
	<u>\$123,567 94</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$29,140 31
Balance of gas manufacturing account,		7,543 63
Interest received,		376 00
Other items of income,		4,700 00
Dividends declared,	\$6,892 00	
Balance June 30, 1889,	34,867 94	
	<u>\$41,759 94</u>	<u>\$41,759 94</u>

MILLER'S RIVER GAS LIGHT COMPANY (ATHOL).

ASSETS.

Real estate, . . . . .	}	. . . . .	\$62,462 54
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Cash on hand,			85 53
Due for gas,			826 44
Other accounts due the company,			60 34
Coal on hand,			110 00
Enrichers on hand,			14 00
Other materials on hand,			160 00
Electric plant,			19,820 46
Total assets, as per books of the company,			\$83,539 31

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	.	\$40,000	00
Bonds issued,	.	.	.	.	.	.	.	.	.	.	20,000	00
Notes payable,	.	.	.	.	.	.	.	.	.	.	5,439	31
Unpaid bills,	.	.	.	.	.	.	.	.	.	.	8	70
Amounts due from company not included above,	.	.	.	.	.	.	.	.	.	.	1,062	86
Electric bonds assumed,	.	.	.	.	.	.	.	.	.	.	16,000	00
Total liabilities, as per books of the company,	.	.	.	.	.	.	.	.	.	.	\$82,510	87
Profit and loss balance,	.	.	.	.	.	.	.	.	.	.	1,028	44
												\$83,539	31

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,	\$3,753 78	
Balance of gas manufacturing account,		\$493 44
Balance of electric light manufacturing account,		506 25
Transfer electric light account,		5,546 90
Interest paid,	1,764 37	
Balance June 30, 1889,	1,028 44	
	\$6,546 59	\$6,546 59

MUTUAL GAS LIGHT COMPANY OF SOUTHBRIDGE.

ASSETS.

Real estate,	\$5,515 49
Machinery and manufacturing appliances,	1,041 83
Street mains,	6,986 04
Meters,	1,140 15
Cash on hand,	47 20
Due for gas,	186 13
Other accounts due the company,	120 24
Tar on hand,	18 00
Enrichers on hand,	245 00
Other materials on hand,	322 22
Fixtures on hand,	70 71

Total assets, as per books of the company,	<u>\$15,693 01</u>
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LIABILITIES.

Capital stock,	\$15,000 00
Total liabilities, as per books of the company,	<u>\$15,000 00</u>
Profit and loss balance,	693 01
	<u>\$15,693 01</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$915 92
Balance of gas manufacturing account,		825 92
Rents,		56 25
Other items of income,		6 73
Interest paid,	\$8 53	
Dividends declared,	900 00	
Construction charged off,	114 91	
Depreciation,	10 70	
Other items,	77 67	
Balance June 30, 1889,	693 01	
	<u>\$1,804 82</u>	<u>\$1,804 82</u>

NANTUCKET GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,000 00
Machinery and manufacturing appliances,	20,000 00
Street mains,	9,390 57
Meters,	4,000 00
Cash on hand,	20 37
Due for gas,	798 20
Coal on hand,	1,018 00
Coke on hand,	20 00
Tar on hand,	30 00
Purifying materials on hand,	3 00
Notes receivable,	2,000 00
Investments,	368 00
Total assets, as per books of the company,	<u>\$40,648 14</u>

LIABILITIES.

Capital stock,	\$36,000 00
Amounts due from the company, not included above,	83 32
Total liabilities, as per books of the company,	<u>\$36,083 32</u>
Profit and loss balance,	4,564 82
	<u>\$40,648 14</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$4,764 55
Balance of gas manufacturing account,		1,445 27
Interest received,		165 00
Dividends declared,	\$1,800 00	
Balance June 30, 1889,	4,564 82	
	<u>\$6,364 82</u>	<u>\$6,364 82</u>

NATICK GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$16,670 38
Machinery and manufacturing appliances, }	
Street mains,	21,493 29
Meters,	
Cash on hand,	565 59
Due for gas,	1,785 66
Coal on hand,	323 36
Coke on hand,	37 09
Tar on hand,	165 30
Enrichers on hand,	6 15
Other materials on hand,	124 12
Stoves and fixtures on hand,	750 09
Total assets, as per books of the company,	<u>\$41,921 03</u>

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	8,500 00
Amounts due from the company, not included above,	35
Total liabilities, as per books of the company,	<u>\$28,500 35</u>
Profit and loss balance,	13,420 68
	<u>\$41,921 03</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$12,373 85
Balance of gas manufacturing account,		3,192 48
Interest paid,	\$474 44	
Dividends declared,	1,600 00	
Depreciation,	71 21	
Balance June 30, 1889,	13,420 68	
	<u>\$15,566 33</u>	<u>\$15,566 33</u>

NEW BEDFORD GAS LIGHT COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$161,164 08
Machinery and manufacturing appliances,			
Street mains,			124,686 05
Meters,			34,111 24
Cash on hand,			1,286 26
Due for gas,			10,069 31
Other accounts due the company,			2,119 73
Coal on hand,			7,403 76
Coke on hand,			629 00
Tar on hand,			526 00
Purifying materials on hand,			218 75
Other materials on hand,			175 00
Stoves on hand,			11,767 68
Fixtures on hand,			11,813 06
Street light account,			2,300 00
Electric account,			220,984 28
Total assets, as per books of the company,			\$589,254 20

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	.	\$300,000	00
Notes payable,	.	.	.	.	.	.	.	.	.	193,800	00
Unpaid bills,	.	.	.	.	.	.	.	.	.	4,599	66
Deposits,	.	.	.	.	.	.	.	.	.	151	00
Reserved fund,	.	.	.	.	.	.	.	.	.	41,949	46
Depreciation fund,	.	.	.	.	.	.	.	.	.	3,536	71
											<hr/>	
Total liabilities, as per books of the company,	.	.	.	.	.	.	.	.	.	\$544,036	83
Profit and loss balance,	.	.	.	.	.	.	.	.	.	45,217	37
											<hr/>	
											\$589,254	20

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$22,920 86
Balance of gas manufacturing account,		27,838 80
Balance of electric light manufacturing account,		5,893 22
Premium on sale of new stock,		19,622 75
Interest paid,	\$7,558 26	
Dividends declared,	23,000 00	
Other items,	500 00	
Balance June 30, 1889,	45,217 37	
		\$76,275 63
		\$76,275 63

NEWBURYPORT GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate,	\$1,132 43
Machinery and manufacturing appliances,	75,000 00
Street mains,	4,857 94
Meters,	1,178 03
Cash on hand,	2,134 26
Due for gas,	3,221 14
Other accounts due the company,	244 71
Coal on hand,	1,266 70
Coke on hand,	120 00
Tar on hand,	182 00
Enrichers on hand,	14 00
Purifying materials on hand,	60 00
Other materials on hand,	350 00
Lungren lamps,	167 30
Fixtures on hand, supply pipes, fittings, etc,	130 06
Total assets, as per books of the company,	<u>\$90,058 57</u>

LIABILITIES.

Capital stock,	\$80,000 00
Notes payable,	4,500 00
Unpaid dividends,	389 50
Total liabilities, as per books of the company,	<u>\$84,889 50</u>
Profit and loss balance,	5,169 07
	<u>\$90,058 57</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$11,735 86
Balance of gas manufacturing account,		7,583 82
Interest received,		90 00
Other items of income,		221 26
Interest paid,	\$61 87	
Dividends declared,	14,400 00	
Balance June 30, 1889,	5,169 07	
	<u>\$19,630 94</u>	<u>\$19,630 94</u>

NEWTON AND WATERTOWN GAS LIGHT COMPANY.

ASSETS.

Real estate,		
Machinery and manufacturing appliances, }		
Street mains,		\$289,866 23
Meters,		
Cash on hand,		747 69
Due for gas,		16,888 31
Other accounts due the company,		2,563 08
Coal on hand,		3,399 27
Coke on hand,		60 00
Tar on hand,		900 00
Purifying materials on hand,		80 00
Other materials on hand,		3,037 00
Stoves on hand, . }		
Fixtures on hand, }		2,176 68
Office furniture,		777 40
Notes receivable,		224 92
Investments,		7,895 27
Electric light plant,		77,072 65
Total assets, as per books of the company,		\$405,188 50

LIABILITIES.

Capital stock,	\$200,000 00
Notes payable,	42,000 00
Unpaid bills,	7,392 67
Deposits,	35 00
Unpaid dividends,	984 00
Other loans,	20,000 00
Contingent fund,	25,000 00

Total liabilities, as per books of the company,	\$295,411 67
Profit and loss balance,	109,776 83

\$405,188 50

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$107,159 05
Balance of gas manufacturing account,		30,577 55
Balance electric light manufacturing account,		1,442 37
Interest received,		394 63
Rents,		1,510 00
Other items of income,		525 00
Interest paid,	\$1,293 17	
Dividends declared,	16,000 00	
Depreciation,	489 62	
Other items,	14,048 98	
Balance June 30, 1889,	109,776 83	
	\$141,608 60	\$141,608 60

NORTH ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$60,000 00
Machinery and manufacturing appliances,			
Street mains, . . . . .	}	. . . . .	4,240 95
Meters,			
Cash on hand,			4,376 62
Due for gas,			3,376 40
Coal on hand,			115 70
Coke on hand,			131 70
Tar on hand,			611 00
Enrichers on hand,			212' 02
Other materials on hand,			50 00
Stoves and fixtures on hand,			1,721 23
Horses, wagons, etc.,			581 75
Office furniture,			690 50
Investments,			2,300 00
Total assets, as per books of the company,			<u>\$78,407 87</u>

LIABILITIES.

LIABILITIES.	
Capital stock,	\$50,000 00
Notes payable,	9,000 00
<hr/>	
Total liabilities, as per books of the company,	\$59,000 00
Profit and loss balance,	19,407 87
<hr/>	
	\$78,407 87

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$15,012 06
Balance of gas manufacturing account,		8,963 31
Interest paid,	\$567 50	
Dividends declared,	4,000 00	
Balance June 30, 1889,	19,407 87	
		<u>\$23,975 37</u>
		<u>\$23,975 37</u>

NORTHAMPTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$25,000 00
Machinery and manufacturing appliances,	3,000 00
Street mains,	20,000 00
Cash on hand,	6,029 08
Due for gas,	1,605 72
Other accounts due the company,	92 14
Coal on hand,	61 38
Coke on hand,	24 00
Tar on hand,	262 30
Enrichers on hand,	143 12
Purifying materials on hand,	57 04
Other materials on hand,	1,089 33
Spent lime,	20 00
Investments,	3,250 00
Total assets, as per books of the company,	<u>\$60,634 11</u>

LIABILITIES.

Capital stock,	\$50,000 00
Reserved fund,	5,418 50
Total liabilities, as per books of the company,	<u>\$55,418 50</u>
Profit and loss balance,	5,215 61
	<u>\$60,634 11</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$4,050 25
Balance of gas manufacturing account,		5,260 12
Interest received,		371 20
Rents,		225 00
Dividends declared,	\$4,000 00	
Construction charged off,	679 63	
Other items,	11 33	
Balance June 30, 1889,	5,215 61	
	<u>\$9,906 57</u>	<u>\$9,906 57</u>

NORTH ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$47,474 72
Machinery and manufacturing appliances,	28,550 20
Street mains,	30,487 27
Meters,	5,370 31
Cash on hand,	4,236 13
Due for gas,	1,320 95
Other accounts due the company,	178 49
Coal on hand,	1,929 83
Coke on hand,	478 87
Enrichers on hand,	286 89
Purifying materials on hand,	79 76
Other materials on hand,	288 51
Stoves on hand,	352 25
Fixtures on hand,	1,247 97
Office furniture,	262 50
Notes receivable,	22,650 92

Total assets, as per books of the company, . . . \$145,195 57

LIABILITIES.

Capital stock,	\$68,100 00
Bonds issued,	68,100 00
Unpaid bills,	101 17
Unpaid dividends,	2,043 00
Interest due, but not paid,	1,021 50

Total liabilities, as per books of the company, . . . \$139,365 67

Profit and loss balance, 5,829 90

\$145,195 57

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$12,516 02
Balance of gas manufacturing account,		10,755 62
Interest received,		1,248 93
Rents,		268 75
Other items of income,		61 61
Interest paid,	\$4,086 00	
Dividends declared,	4,086 00	
Depreciation,	10,771 10	
Other items,	77 93	
Balance June 30, 1889,	5,829 90	
	<u>\$24,850 93</u>	<u>\$24,850 93</u>

NORWOOD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,000 00
Machinery and manufacturing appliances, }	
Street mains, }	8,000 00
Meters,	802 65
Cash on hand,	1,989 45
Due for gas,	608 80
Coal on hand,	26 90
Tar on hand,	45 00
Total assets, as per books of the company,	<u>\$14,472 80</u>

LIABILITIES.

Capital stock,	\$12,000 00
Total liabilities, as per books of the company,	<u>\$12,000 00</u>
Profit and loss balance,	2,472 80
	<u>\$14,472 80</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$1,716 98
Balance of gas manufacturing account,		1,503 92
Sundry items,	\$748 10	
Balance June 30, 1889,	2,472 80	
	<u>\$3,220 90</u>	<u>\$3,220 90</u>

PITTSFIELD COAL GAS COMPANY.

ASSETS.

Real estate,	\$22,500 00
Machinery and manufacturing appliances,	14,350 00
Street mains,	19,110 00
Meters,	6,540 00
Cash on hand,	10,035 71
Due for gas,	3,519 75
Other accounts due the company,	512 39
Coal on hand,	1,136 25
Coke on hand,	24 00
Enrichers on hand,	325 00
Purifying materials on hand,	100 00
Stoves on hand,	25 00
Notes receivable,	29,572 00
Investments,	3,550 00

Total assets, as per books of the company, \$111,300 10

LIABILITIES.

Capital stock,	\$62,500 00
Unpaid bills,	3,125 00
Reserved fund,	40,000 00

Total liabilities, as per books of the company, . . . \$105,625 00

Profit and loss balance, 5,675 10

\$111,300 10

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$5,854 11
Balance of gas manufacturing account,		7,710 75
Interest received,		1,995 24
Rents,		115 00
Dividends declared,	\$10,000 00	
Balance June 30, 1889,	5,675 10	
	<u>\$15,675 10</u>	<u>\$15,675 10</u>

PLYMOUTH GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			\$40,000 00
Street mains,			
Cash on hand,			424 67
Due for gas,			1,993 26
Other accounts due the company,			341 38
Coal on hand,			456 27
Coke on hand,			30 00
Tar on hand,			50 00
Enrichers on hand,			8 88
Other materials on hand,			108 98
Stoves on hand,			55 41
Fixtures on hand,			2,096 18
Total assets, as per books of the company,			<u>\$45,565 03</u>

LIABILITIES.

Capital stock,	\$40,000 00
Unpaid bills,	380 30
Unpaid dividends,	60 50
Interest due, but not paid,	29 76
Amounts due from the company, not included above,	238 19
<hr/>	
Total liabilities, as per books of the company,	\$40,708 75
Profit and loss balance,	4,856 28
<hr/>	
	\$45,565 03

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$4,734 55
Balance of gas manufacturing account,		2,772 52
Dividends declared,	\$2,400 00	
Construction charged off,	250 79	
Balance June 30, 1889,	4,856 28	
	<u>\$7,507 07</u>	<u>\$7,507 07</u>

ROXBURY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$116,365 91
Machinery and manufacturing appliances,	293,310 95
Street mains,	243,274 85
Meters,	50,671 00
Cash on hand,	95,946 02
Due for gas,	26,810 49
Other accounts due the company,	2,750 29
Coal on hand,	18,965 57
Coke on hand,	9,615 00
Tar on hand,	100 00
Enrichers on hand,	67 75
Purifying materials on hand,	616 00
Other materials on hand,	5,666 40
Notes receivable,	50,000 00
Total assets, as per books of the company,	<u>\$914,160 25</u>

LIABILITIES.

Capital stock,	\$600,000 00
Unpaid bills,	572 71
Deposits,	3,312 00
Amounts due from the company, not included above,	1,699 99
Total liabilities, as per books of the company,	<u>\$605,584 70</u>
Profit and loss balance,	308,575 55
	<u>\$914,160 25</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$281,145 51
Balance of gas manufacturing account,		103,148 47
Interest received,		7,152 18
Rents,		2,129 39
Dividends declared,	\$60,000 00	
Carried to reserve fund,	25,000 00	
Balance June 30, 1889,	308,575 55	
	<u>\$393,575 55</u>	<u>\$393,575 55</u>

SALEM GAS LIGHT COMPANY.

ASSETS.

Real estate,	
Machinery and manufacturing appliances,	} \$256,183 55
Street mains,	
Meters,	
Cash on hand,	31,982 93
Due for gas,	12,051 08
Other accounts due the company,	27,840 96
Coal on hand,	3,599 85
Tar on hand,	900 00
Enrichers on hand,	449 00
Purifying materials on hand,	712 00
Other materials on hand,	2,419 85
Horses, wagons, etc.,	850 00
Office furniture,	200 00
New works,	63,823 39
Investments,	5,285 25
Total assets, as per books of the company,	\$406,297 86

LIABILITIES.

Capital stock,	\$300,000 00
Deposits,	425 00
Depreciation fund,	20,000 00
Amounts due from the company, not included above,	2,945 00
Total liabilities, as per books of the company,	\$323,370 00
Profit and loss balance,	82,927 86
	<u>\$406,297 86</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$75,301 76
Balance of gas manufacturing account,		26,791 72
Interest received,		1,658 78
Rents,		302 25
Dividends declared,	\$18,000 00	
Other items,	3,126 65	
Balance June 30, 1889,	82,927 86	
	<u>\$104,054 51</u>	<u>\$104,054 51</u>

SOUTH BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$200,945 76
Machinery and manufacturing appliances, }	
Street mains, }	265,800 34
Meters,	17,880 37
Cash on hand,	13,888 34
Due for gas,	7,896 41
Other accounts due the company,	1,445 27
Coal on hand,	18,705 75
Coke on hand,	750 00
Gas on hand,	118 48
Enrichers on hand,	98 73
Purifying materials on hand,	634 00
Other materials on hand,	573 85
Stoves on hand,	352 51
Horses, wagons, etc., }	
Office furniture, . }	1,454 00
Investments,	26,000 00
Total assets, as per books of the company,	\$551,443 81

LIABILITIES.

Capital stock,	\$440,000 00
Notes payable,	43,000 00
Unpaid bills,	2,029 33
Deposits,	1,854 95
Interest due, but not paid,	928 06
Amounts due from the company, not included above,	881 83
Total liabilities, as per books of the company,	\$488,644 17
Profit and loss balance,	62,799 64
	\$551,443 81

PROFIT AND LOSS ACCOUNT.

	DE.	CR.
Balance June 30, 1888,		\$51,940 35
Balance of gas manufacturing account,		46,319 68
Rents,		1,736 38
Interest paid,	\$1,996 77	
Dividends declared,	35,200 00	
Balance June 30, 1889,	62,799 64	
	\$99,996 41	\$99,996 41

SPENCER GAS COMPANY.

ASSETS.

Real estate,	\$21,714 93
Machinery and manufacturing appliances,	72,180 66
Street mains,	34,996 02
Meters,	3,313 45
Due for electric light,	1,227 27
Due for gas,	3,325 75
Other accounts due the company,	5,619 36
Coal on hand,	714 00
Coke on hand,	6 00
Tar on hand,	78 00
Enrichers on hand,	108 00
Purifying materials on hand,	10 00
Other materials on hand,	1,859 87
Stoves on hand,	1,274 13
Fixtures on hand,	850 45
Gas engines,	600 00
Office furniture,	150 00
Tools and meter provers,	545 34
Notes receivable,	230 74
Electric light plant,	23,562 28
<hr/>	
Total assets, as per books of the company,	\$172,366 25
Profit and loss balance,	7,097 80
<hr/>	
	\$179,464 05

LIABILITIES.

Capital stock,	\$85,000 00
Bonds issued,	85,000 00
Unpaid bills,	9,464 05
<hr/>	
Total liabilities, as per books of the company,	\$179,464 05

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,	\$2,860 20	
Balance of gas manufacturing account,	1,979 14	
Balance of electric light manufacturing account,		\$1,821 54
Rents,		720 00
Interest paid,	4,800 00	
Balance June 30, 1889,		7,097 80
<hr/>		<hr/>
	\$9,639 34	\$9,639 34

SPRINGFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$84,625 80
Machinery and manufacturing appliances,	299,259 13
Street mains,	170,616 88
Services,	30,041 26
Meters,	27,938 26
Cash on hand,	14,107 31
Due for gas,	4,701 12
Other accounts due the company,	8,584 96
Coal on hand,	5,815 12
Enrichers on hand,	663 68
Purifying materials on hand,	175 11
Other materials on hand,	500 00
Stoves on hand,	1,314 56
Fixtures on hand,	803 45
Horses, wagons, etc.,	2,500 00
Office furniture,	1,275 00
Notes receivable,	1,322 43
Steam plant and fittings,	76,981 34
Total assets, as per books of the company,	<u>\$731,225 41</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	75,000 00
Deposits,	658 75
Unpaid dividends,	74 00

Total liabilities, as per books of the company,	\$575,732 75
Profit and loss balance,	155,492 66

\$731,225 41

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$136,219 08
Balance of gas manufacturing account,		61,704 49
Steam heating,		32,042 41
Interest received,		138 14
Rents,		809 02
Other items of income,		3 40
Interest paid,	\$3,445 60	
Dividends declared,	40,000 00	
Depreciation, steam plant,	31,978 28	
Balance June 30, 1889,	155,492 66	
	<u>\$230,916 54</u>	<u>\$230,916 54</u>

STOUGHTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$6,819 00
Machinery and manufacturing appliances,	30,445 25
Street mains,	10,472 43
Meters,	917 00
Coal on hand,	368 28
Electric assets,	30,838 29
Total assets, as per books of the company,	<u>\$79,860 25</u>
Profit and loss balance,	1,114 75
	<u>\$80,975 00</u>

LIABILITIES.

Capital stock,	\$40,000 00
Bonds issued,	40,000 00
Interest due, but not paid,	975 00
Total liabilities, as per books of the company,	<u>\$80,975 00</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of manufacturing account,	\$1,114 75	
Balance June 30, 1889,		\$1,114 75
	<u>\$1,114 75</u>	<u>\$1,114 75</u>

TAUNTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$26,500 00
Machinery and manufacturing appliances,	53,500 00
Cash on hand,	10,533 04
Due for gas,	8,770 51
Other accounts due the company,	2,251 60
Coal on hand,	810 88
Coke on hand,	2 50
Tar on hand,	218 75
Enrichers on hand,	11 41
Purifying materials on hand,	336 25
Other materials on hand,	245 00
Stoves on hand,	1,161 39
Fixtures on hand,	3,360 93
Lungren lamps,	1,553 64

Total assets, as per books of the company, \$109,255 90

LIABILITIES.

Capital stock,	\$80,000 00
Deposits,	149 00

Total liabilities, as per books of the company, \$80,149 00

Profit and loss balance, 29,106 90

\$109,255 90

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$33,158 71
Balance of gas manufacturing account,		16,803 65
Rents,		150 00
Interest paid,	\$3 33	
Dividends declared,	12,000 00	
Construction charged off,	7,322 87	
Depreciation,	1,679 26	
Balance June 30, 1889,	29,106 90	
	<u>\$50,112 36</u>	<u>\$50,112 36</u>

WALTHAM GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$24,305 78
Machinery and manufacturing appliances,	80,064 06
Street mains,	42,884 46
Meters,	5,500 00
Cash on hand,	3,442 18
Due for gas,	6,068 50
Other accounts due the company,	2,951 41
Coal on hand,	2,153 23
Coke on hand,	2 50
Tar on hand,	500 75
Enrichers on hand,	29 81
Purifying materials on hand,	317 55
Other materials on hand,	2,745 02
Stoves on hand,	128 98
Fixtures on hand,	1,327 52
Horses, wagons, etc.,	827 67
Office furniture,	750 98
Electric light plant,	34,699 23
Total assets, as per books of the company,	<u>\$208,699 63</u>

LIABILITIES.

Capital stock,	\$140,000 00
Bonds issued,	20,000 00
Total liabilities, as per books of the company,	<u>\$160,000 00</u>
Profit and loss balance,	48,699 63
	<u>\$208,699 63</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$31,697 32
Balance of gas manufacturing account,		22,186 81
Balance of electric light manufacturing account,		4,276 76
Other items of income,		830 62
Interest paid,	\$1,175 00	
Dividends declared,	8,400 00	
Depreciation,	689 50	
Other items,	27 38	
Balance June 30, 1889,	48,699 63	
	<u>\$58,991 51</u>	<u>\$58,991 51</u>

WEBSTER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$25,521 14
Steam plant, electric,	11,634 81
Machinery and manufacturing appliances, gas,	2,250 00
Electric plant,	14,107 60
Street mains,	10,000 00
Electric lines, meters, lamps and globes,	9,486 45
Meters, gas,	2,000 00
Cash on hand,	166 61
Due for gas,	163 40
Due for electric light and power,	545 63
Other accounts due the company,	557 85
Coal on hand,	395 00
Oil and waste on hand,	48 00
Tar on hand,	100 00
Other materials on hand,	1,201 76
Total assets, as per books of the company,	<u>\$78,178 25</u>

LIABILITIES.

Capital stock,	\$45,000 00
Bonds issued,	30,000 00
Notes payable,	400 00
Unpaid bills,	1,482 01
Total liabilities, as per books of the company,	<u>\$76,882 01</u>
Profit and loss balance,	1,296 24
	<u>\$78,178 25</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$13 83
Balance of gas manufacturing account,		828 45
Balance of electric light manufacturing account,		703 00
Other items of income,		662 79
Interest paid,	\$911 83	
Balance June 30, 1889,	1,296 24	
	<u>\$2,208 07</u>	<u>\$2,208 07</u>

WESTFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$2,430 00
Machinery and manufacturing appliances,	29,691 17
Street mains,	13,555 51
Meters,	1,253 60
Cash on hand,	1,454 36
Due for gas,	2,513 95
Other accounts due the company,	139 75
Coal on hand,	405 72
Enrichers on hand,	205 41
Purifying materials on hand,	60 00
Fixtures on hand,	161 15
Services,	1,617 95
Electric light plant,	36,253 15
Total assets, as per books of the company,	<u>\$89,741 72</u>

LIABILITIES.

Capital stock,	\$54,000 00
Notes payable,	26,000 00
Unpaid bills,	6 35

Total liabilities, as per books of the company,	\$80,006 35
Profit and loss balance,	9,735 37

\$89,741 72

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$6,133 88
Balance of gas manufacturing account,		5,675 05
Balance of electric light manufacturing account,		2,687 44
Other items of income,		585 38
Dividends declared,	\$4,320 00	
Interest paid,	818 50	
Depreciation,	207 88	
Balance June 30, 1889,	9,735 37	
	<u>\$15,081 75</u>	<u>\$15,081 75</u>

WOBURN GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$9,706 17
Machinery and manufacturing appliances,	28,929 78
Street mains,	28,306 94
Meters,	3,000 00
Cash on hand,	2,561 24
Due for gas,	1,698 54
Other accounts due the company,	434 71
Coal on hand,	1,457 50
Enrichers on hand,	35 00
Purifying materials on hand,	200 00
Other materials on hand,	135 00
Lungren lamps,	246 76
Office furniture,	140 25
Notes receivable,	7,500 00
Investments,	2,350 00
Total assets, as per books of the company,	<u>\$86,701 89</u>

LIABILITIES.

Capital stock,	\$45,100 00
Unpaid bills,	285 20
Deposits,	5 00
Total liabilities, as per books of the company,	<u>\$45,390 20</u>
Profit and loss balance,	41,311 69
	<u>\$86,701 89</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1888,		\$41,183 06
Balance of gas manufacturing account,		5,352 31
Interest received,		410 80
Other items of income,		218 79
Dividends declared,	\$3,608 00	
Depreciation,	2,245 27	
Balance June 30, 1889,	41,311 69	
	<u>\$47,164 96</u>	<u>\$47,164 96</u>

WORCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$126,000 00
Machinery and manufacturing appliances,	170,456 22
Street mains,	219,772 81
Meters,	17,664 56
Cash on hand,	4,627 13
Due for gas,	735 65
Coal on hand,	5,927 15
Coke on hand,	2,500 00
Tar on hand,	1,000 00
Enrichers on hand,	525 00
Stoves and fixtures on hand,	650 00
Investments,	3,352 50
Total assets, as per books of the company,	<u>\$553,211 02</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	20,000 00
Deposits,	511 00
Unpaid dividends,	10,198 00

Total liabilities, as per books of the company,	\$530,709 00
Profit and loss balance,	22,502 02

\$553,211 02

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1888,		\$29,955 53
Balance of gas manufacturing account,		50,037 30
Interest received,		326 68
Other items of income,		29 38
Interest paid,	\$890 98	
Dividends declared,	32,500 00	
Depreciation,	36 69	
To depreciation fund,	24,419 20	
Balance June 30, 1889,	22,502 02	
	<u>\$80,348 89</u>	<u>\$80,348 89</u>

APPENDIX B.

BALANCE SHEETS ELECTRIC LIGHT COMPANIES, JUNE 30, 1889.

ADAMS ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$2,870 10
Steam plant,	9 60
Electric plant,	39 32
Lines, meters, lamps and globes,	645 03
Cash on hand,	1,435 95
	<hr/>
Total assets, as per books of the company,	\$5,000 00

LIABILITIES.

Capital stock,	\$5,000 00
	<hr/>
Total liabilities, as per books of the company,	\$5,000 00

BOSTON ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$314,688 60
Steam plant,	205,600 94
Electric plant,	217,394 04
Lines, meters, lamps and globes,	629,884 65
Cash on hand,	8,493 03
Due for light and power,	25,621 81
Other accounts due the company,	8,226 06
Fuel on hand,	4,468 73
Carbons on hand,	2,783 90

Oil and waste on hand,	\$71 95
Incandescent lamps on hand,	2,249 59
Globes on hand,	962 63
Fixtures and materials on hand,	19,880 51
Motors on hand,	1,355 45
Horses, wagons, etc.,	739 39
Office furniture,	1,922 72
Total assets, as per books of the company, . . .	<u>\$1,444,344 08</u>

LIABILITIES.

Capital stock,	\$1,000,000 00
Bonds issued,	228,000 00
Notes payable,	87,155 21
Unpaid bills,	17,933 10
Interest due, but not paid,	5,434 00
Total liabilities, as per books of the company, . .	<u>\$1,338,522 31</u>
Profit and loss balance,	105,821 77
	<u>\$1,444,344 08</u>

CAMBRIDGE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$47,980 67
Steam plant,	56,666 96
Construction,	5,944 57
Franchise,	15,000 00
Lines, meters, lamps and globes,	69,509 56
Cash on hand,	8,157 52
Due for light and power,	5,977 90
Other accounts due the company,	2,718 66
Fuel on hand,	3,606 17
Total assets, as per books of the company, . . .	<u>\$268,556 81</u>
Profit and loss balance,	9,321 62
	<u>\$277,878 43</u>

LIABILITIES.

Capital stock,	\$200,000 00
Bonds issued,	50,000 00
Notes payable,	19,000 00
Unpaid bills,	7,339 43
Interest due, but not paid,	1,539 00
Total liabilities, as per books of the company, . .	<u>\$277,878 43</u>

CHICOPEE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$1,020 77
Steam plant,	3,195 32
Electric plant,	2,673 97
Lines, meters, lamps and globes,	6,456 20
Cash on hand,	489 57
Due for light and power,	300 00
Carbons on hand,	11 00
Oil and waste on hand,	3 00
Other materials on hand,	100 00
Total assets, as per books of the company,	<u>\$14,249 82</u>

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	2,900 00
Unpaid bills,	1,080 00
Interest due, but not paid,	39 80
Amounts due from the company, not included above,	104 78
Total liabilities, as per books of the company,	<u>\$14,124 58</u>
Profit and loss balance,	125 24
	<u>\$14,249 82</u>

EDISON ELECTRIC ILLUMINATING COMPANY OF BOSTON.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$648,380 99
Steam plant,			
Electric plant,			
Patent rights,			
Lines, meters, lamps and globes,)			
Cash on hand,			4,265 39
Due for light and power, . . . . .	}	. . . . .	17,326 98
Other accounts due the company, }			
Stock of all kinds on hand,			10,268 92
Total assets, as per books of the company,			<u>\$680,242 28</u>

LIABILITIES.

Capital stock,	\$500,000 00
Bonds issued,	150,000 00
Notes payable,	13,055 50
Unpaid bills,	6,783 61
Amounts due from the company, not included above,	4,489 34
Total liabilities, as per books of the company,	<u>\$674,328 45</u>
Profit and loss balance,	5,913 83
	<u>\$680,242 28</u>

EDISON ELECTRIC ILLUMINATING COMPANY OF BROCKTON.

ASSETS.

Real estate,	\$29,343 26
Steam plant,	26,157 27
Electric plant,	17,854 79
Patent rights,	16,500 00
Lines, meters, lamps and globes,	41,775 88
Cash on hand,	116 64
Due for light and power,	4,700 66
Carbons on hand,	76 55
Oil and waste on hand,	36 71
Incandescent lamps on hand,	710 40
Materials on hand,	2,448 20
Motors on hand,	474 84
Interest, insurance and taxes (present worth),	527 66
Arc system,	40,130 45

Total assets, as per books of the company, . . . \$180,853 31

LIABILITIES.

Capital stock,	\$71,000 00
Bonds issued,	80,000 00
Notes payable,	17,000 00
Unpaid bills,	177 30
Interest due, but not paid,	933 34
Reserve fund,	11,742 67

Total liabilities, as per books of the company, . . . \$180,853 31

EDISON ELECTRIC ILLUMINATING COMPANY OF FALL RIVER.

ASSETS.

Real estate,	\$4,500 00
Steam plant,	13,500 00
Electric plant,	15,215 83
Patent rights,	27,000 00
Lines, meters, lamps and globes,	19,554 24
Cash on hand,	845 94
Due for light and power,	755 80
Other accounts due the company,	2,026 54
Materials on hand,	4,690 40

Total assets, as per books of the company, . . . \$98,088 75

LIABILITIES.

Capital stock,	\$81,600 00
Notes payable,	11,000 00
Unpaid bills,	3,007 98
Total liabilities, as per books of the company,	\$95,607 98
Profit and loss balance,	2,480 77
	<u>\$98,088 75</u>

EDISON ELECTRIC ILLUMINATING COMPANY OF LAWRENCE.

ASSETS.

Construction account,	\$75,864 13
Cash on hand,	1,665 56
Due for light and power,	1,273 87
Other accounts due the company,	1,447 50
Fuel on hand,	163 25
Carbons on hand,	53 00
Oil and waste on hand,	137 50
Incandescent lamps on hand,	110 00
Motors on hand,	2,396 29
Steam-heating plant,	2,702 71
Municipal plant,	17,248 31
Chimney,	2,391 91
Merchandise on hand,	1,210 55
Total assets, as per books of the company,	<u>\$106,664 58</u>

LIABILITIES.

Capital stock,	\$65,000 00
Bonds issued,	36,700 00
Total liabilities, as per books of the company,	\$101,700 00
Profit and loss balance,	4,964 58
	<u>\$106,664 58</u>

EDISON ELECTRIC ILLUMINATING COMPANY OF
NEW BEDFORD.

ASSETS.

Real estate,	\$16,373 33
Steam plant,	27,854 70
Incandescent light plant,	37,811 99
Arc light plant,	2,264 75
Patent rights,	22,500 00
Meters,	2,927 96
Cash on hand,	214 67

Due for light and power,	\$1,698 66
Other accounts due the company,	1,457 12
Fuel on hand,	75 35
Oil and waste on hand,	19 56
Incandescent lamps on hand,	696 60
Other materials on hand,	5,064 37
Motors on hand,	3,066 00
Fixtures on hand,	246 31
Stock in consumers' hands,	4,328 00
Office furniture,	101 85
Notes receivable,	351 77
Sundry accounts,	537 57
Total assets, as per books of the company,	<u>\$127,590 53</u>

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	20,000 00
Unpaid bills,	2,253 15
Interest due, but not paid,	153 79
Total liabilities, as per books of the company,	<u>\$122,406 94</u>
Profit and loss balance,	5,183 59
	<u>\$127,590 53</u>

ELECTRIC LIGHT AND PATENT FLOORING COMPANY.
AMESBURY.

ASSETS.

Real estate,	\$40,781 90
Steam plant,	9,696 66
Electric plant,	19,586 88
Patent rights,	4,000 00
Lines, meters, lamps and globes,	1,155 00
Wood-working machinery,	13,900 00
Miscellaneous,	1,909 00
Notes receivable,	1,000 00
Total assets, as per books of the company,	<u>\$92,029 44</u>

LIABILITIES.

Capital stock,	\$35,600 00
Notes payable,	56,416 72
Total liabilities, as per books of the company,	<u>\$92,016 72</u>
Profit and loss balance,	12 72
	<u>\$92,029 44</u>

FALL RIVER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$21,764 43
Steam plant,	18,684 93
Electric plant,	33,089 73
Patent rights,	8,000 00
Lines, poles and lamps,	19,446 39
Cash on hand,	1,808 71
Due for light,	3,393 76

Total assets, as per books of the company, . . . \$106,187 95

LIABILITIES.

Capital stock,	\$90,000 00
Notes payable,	8,650 00
Amounts due from the company, not included above, . . .	250 00

Total liabilities, as per books of the company, . . . \$98,900 00

Profit and loss balance, 7,287 95

\$106,187 95

FRANKLIN ELECTRIC LIGHT COMPANY (TURNER'S FALLS).

ASSETS.

Electric plant,	\$5,020 00
Cash on hand,	4 49
Carbons on hand,	24 00
Oil and waste on hand,	5 00
Incandescent lamps on hand,	15 00
Globes on hand,	10 00

Total assets, as per books of the company, . . . \$5,078 49

LIABILITIES.

Capital stock,	\$5,000 00
Reserved fund,	78 49

Total liabilities, as per books of the company, . . . \$5,078 49

GARDNER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$9,331 73
Steam plant,	11,338 72
Electric plant,	15,692 00
Lines, meters, lamps and globes,	17,082 06
Cash on hand,	1,549 24

Due for light and power,	\$1,207 84
Other accounts due the company,	1,614 17
Fuel on hand,	356 25
Carbons on hand,	63 00
Oil and waste on hand,	49 40
Incandescent lamps on hand,	113 25
Globes on hand,	22 50
Other materials on hand,	1,054 31
Fixtures on hand,	18 96
Horses, wagons, etc.,	145 00
Office furniture,	60 00
Stock in consumers' hands,	1,035 90
<hr/>	
Total assets, as per books of the company,	\$60,734 33
Profit and loss balance,	1,026 53
<hr/>	
	\$61,760 86

LIABILITIES.

Capital stock,	\$26,900 00
Notes payable,	9,700 00
Unpaid bills,	25,160 86
<hr/>	
Total liabilities, as per books of the company,	\$71,760 86

GLOUCESTER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$4,650 00
Steam plant,	5,500 74
Electric plant,	7,037 44
Lines, meters, lamps and globes,	5,125 34
Cash on hand,	191 74
Due for light and power,	602 39
Carbons on hand,	50 00
Oil and waste on hand,	20 00
Incandescent lamps on hand,	72 00
Globes on hand,	4 80
Notes receivable,	450 00
<hr/>	
Total assets, as per books of the company,	\$23,733 45

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	100 00
Unpaid bills,	999 12
<hr/>	
Total liabilities, as per books of the company,	\$21,099 12
Profit and loss balance,	2,634 33
<hr/>	
	\$23,733 45

GREAT BARRINGTON ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$5,530 28
Electric plant,	} 13,636 77
Patent rights,	
Lines, meters, lamps and globes,	
Cash on hand,	1,059 87
Due for light and power,	149 34
Fuel on hand,	46 00
Carbons on hand,	34 65
Incandescent lamps on hand,	64 41
Globes on hand,	6 00
Other materials on hand,	1,065 21
Motors on hand,	48 00
Fixtures on hand,	12 50

Total assets, as per books of the company, \$21,653 03

LIABILITIES.

Capital stock,	\$16,000 00
Notes payable,	3,300 00
Unpaid bills,	2,026 56
Interest due, but not paid,	60 92

Total liabilities, as per books of the company, \$21,387 48

Profit and loss balance, 265 55

\$21,653 03

GREENFIELD ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Steam plant,	\$5,322 44
Electric plant,	18,688 96
Lines, meters, lamps and globes,	2,411 65
Cash on hand,	354 48
Due for light and power,	422 15
Fuel on hand,	103 50
Carbons on hand,	15 00
Oil and waste on hand,	85 00
Incandescent lamps on hand,	262 80
Other materials on hand,	314 52

Total assets, as per books of the company, \$27,980 50

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	11,250 00
Unpaid bills,	1,154 05
Total liabilities, as per books of the company,	\$27,404 05
Profit and loss balance,	576 45
	<u>\$27,980 50</u>

HUDSON ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$1,865 77
Electric plant,	4,834 75
Lines, meters, lamps and globes,	6,058 72
Cash on hand,	356 88
Due for light and power,	261 55
Stock in treasury,	8,975 00
Total assets, as per books of the company,	<u>\$21,852 67</u>

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	5,584 85
Unpaid bills,	1,027 73
Total liabilities, as per books of the company,	<u>\$21,612 58</u>
Profit and loss balance,	240 09
	<u>\$21,852 67</u>

HYDE PARK ELECTRIC COMPANY.

ASSETS.

Steam plant,	\$13,921 15
Electric plant,	35,394 78
Lines, meters, lamps and globes,	21,836 46
Due for light and power,	3,687 16
Fuel on hand,	25 00
Carbons on hand,	30 00
Oil and waste on hand,	47 05
Incandescent lamps on hand,	75 00
Globes on hand,	28 00
Unexpired insurance,	400 00
Total assets, as per books of the company,	<u>\$75,444 60</u>

LIABILITIES.

Capital stock,	\$25,000 00
Notes payable,	46,152 39
Unpaid bills,	1,577 92
Total liabilities, as per books of the company,	\$72,730 31
Profit and loss balance,	2,714 29
	<hr/>
	\$75,444 60

LEICESTER ELECTRIC COMPANY.

ASSETS.

Real estate, }	\$4,500 00
Steam plant, }	
Electric plant,	6,456 65
Cash on hand,	152 22
Due for light and power,	204 56
Other accounts due the company,	887 85
Oil and waste on hand,	12 88
Other materials on hand,	15 11
Construction supplies,	7,659 57
Total assets, as per books of the company,	\$19,888 84
Profit and loss balance,	884 28
	<hr/>
	\$20,773 12

LIABILITIES.

Capital stock,	\$4,000 00
Notes payable,	8,900 00
Unpaid bills,	7,873 12
Total liabilities, as per books of the company,	\$20,773 12

THE LOWELL ELECTRIC LIGHT CORPORATION.

ASSETS.

Real estate,	\$34,680 66
Steam plant,	28,762 20
Electric plant,	154,601 10
Lines, meters, lamps and globes,	27,851 16
Cash on hand,	7,058 74
Due for light and power,	5,132 36
Fuel on hand,	76 00
Carbons on hand,	60 00
Oil and waste on hand,	8 00
Incandescent lamps on hand,	42 00
Globes on hand,	16 50
Horses, wagons, etc.,	100 00
Office furniture,	50 00
Total assets, as per books of the company,	<hr/>
	\$258,438 72

LIABILITIES.	
Capital stock,	\$141,000 00
Notes payable,	84,000 00
Unpaid bills,	4,701 99
Total liabilities, as per books of the company, . . .	\$229,701 99
Profit and loss balance,	28,736 73
	<hr/>
	\$258,438 72

MALDEN ELECTRIC COMPANY.

ASSETS.	
Real estate,	\$10,500 00
Steam plant, }	84,450 00
Electric plant, }	
Patent rights,	55,000 00
Lines, poles and wire construction,	60,000 00
Cash on hand,	2,643 31
Due for light and power,	4,383 44
Other accounts due the company,	1,190 00
Fuel on hand,	801 50
Horses, wagons, etc.,	600 00
Office furniture,	75 00
Total assets, as per books of the company,	<hr/> \$219,643 25
LIABILITIES.	
Capital stock,	\$100,000 00
Bonds issued,	80,000 00
Notes payable,	30,000 00
Unpaid bills,	3,554 68
Total liabilities, as per books of the company,	<hr/> \$213,554 68
Profit and loss balance,	6,088 57
	<hr/>
	\$219,643 25

MARLBOROUGH ELECTRIC COMPANY.

ASSETS.	
Real estate,	\$3,557 13
Steam plant,	7,876 69
Electric plant,	22,389 45
Lines, meters, lamps and globes,	14,340 78
Cash on hand,	621 05
Due for light and power,	824 06
Fuel on hand,	196 50
Carbons on hand,	72 67
Oil and waste on hand,	23 60
Incandescent lamps on hand,	95 20
Globes on hand,	24 26
Total assets, as per books of the company,	<hr/> \$50,021 39

LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	16,250 00
Unpaid bills,	592 71
<hr/>	
Total liabilities, as per books of the company, . . .	\$46,842 71
Profit and loss balance,	3,178 68
<hr/>	
	\$50,021 39

NATICK ELECTRIC COMPANY.

ASSETS.

Steam plant,	\$5,860 00
Electric plant,	11,890 00
Lines, meters, lamps and globes,	17,640 00
Cash on hand,	268 89
Due for light and power,	778 92
Carbons on hand,	30 00
Oil and waste on hand,	27 00
Incandescent lamps on hand,	75 00
Globes on hand,	5 00
Other materials on hand,	500 00

Total assets, as per books of the company, . . . \$37,075 31

LIABILITIES.

Capital stock,	\$15,700 00
Notes payable,	17,361 40
Unpaid bills,	2,000 00

Total liabilities, as per books of the company, . . . \$35,061 40

Profit and loss balance, 2,013 91

\$37,075 31

NEWBURYPORT ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$8,490 79
Steam plant,	13,144 05
Electric plant,	21,780 77
Lines, meters, lamps and globes,	17,938 49
Cash on hand,	370 11

Due for light and power,	\$2,465 03
Fuel on hand,	188 00
Carbons on hand,	145 00
Oil and waste on hand,	10 00
Incandescent lamps on hand,	571 02
Globes on hand,	65 00
Other materials on hand,	842 55
Motors on hand,	1,337 75
Horses, wagons, etc.,	675 00
Office furniture,	46 22
Insurance paid in advance,	394 50

Total assets, as per books of the company, \$68,464 28

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	11,000 00
Unpaid bills,	4,079 78

Total liabilities, as per books of the company, . . . \$65,079 78

Profit and loss balance, 3,384 50

\$68,464 28

NORTH ADAMS ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Steam plant,	\$1,810 62
Electric plant,	4,810 00
Lines, meters, lamps and globes,	5,265 31
Cash on hand,	01
Due for light and power,	430 13
Carbons on hand,	96 00
Oil and waste on hand,	21 50
Incandescent lamps on hand,	34 75
Globes on hand,	34 35
Other materials on hand,	47 57

Total assets, as per books of the company, \$12,550 24

LIABILITIES.

Capital stock,	\$7,500 00
Notes payable,	1,400 00
Unpaid bills,	322 13

Total liabilities, as per books of the company, . . . \$9,222 13

Profit and loss balance, 3,328 11

\$12,550 24

NORTHAMPTON ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$13,855 42
Steam plant, }	
Electric plant, }	25,973 55
Lines, meters, lamps and globes,	35,372 18
Cash on hand,	2,002 35
Due for light and power,	984 81
Fuel on hand,	50 00
Oil and waste on hand,	70 00
Other materials on hand,	80 38
Office furniture,	89 80
Insurance,	150 00

Total assets, as per books of the company, . . . \$78,628 49

LIABILITIES.

Capital stock,	\$58,700 00
Notes payable,	15,934 01
Unpaid bills,	1,684 46

Total liabilities, as per books of the company, . . . \$76,318 47

Profit and loss balance, 2,310 02

\$78,628 49

NORTH ATTLEBOROUGH STEAM AND ELECTRIC COMPANY.

ASSETS.

Real estate,	\$3,195 75
Construction,	75,660 18
Cash on hand,	2,207 35
Due for light and power,	1,342 40
Fuel on hand,	549 50
Carbons on hand,	261 00
Oil and waste on hand,	51 10
Incandescent lamps on hand,	303 75
Globes on hand,	56 40
Other materials on hand,	122 00
Motors on hand,	2,422 40
Office furniture,	60 00

Total assets, as per books of the company, . . . \$86,231 83

LIABILITIES.

Capital stock,	\$40,000 00
Bonds issued,	30,000 00
Notes payable,	7,500 00
Unpaid bills,	3,320 01
Total liabilities, as per books of the company,	\$80,820 01
Profit and loss balance,	5,411 82
	<u>\$86,231 83</u>

NORTH SHORE ELECTRIC COMPANY (REVERE).

ASSETS.

Real estate,	\$12,486 18
Steam plant,	34,842 89
Electric plant,	52,354 02
Patent rights,	25,000 00
Lines, meters, lamps and globes,	65,464 61
Cash on hand,	162 05
Due for light and power,	2,503 86
Other accounts due the company,	363 60
Material on hand,	4,516 77
Fixtures on hand,	127 50
Horses, wagons, etc.,	205 50
Office furniture,	275 75
Total assets, as per books of the company,	<u>\$198,302 72</u>

LIABILITIES.

Capital stock,	\$80,000 00
Bonds issued,	75,000 00
Notes payable,	4,050 00
Unpaid bills,	37,267 62
Total liabilities, as per books of the company,	\$196,317 62
Profit and loss balance,	1,985 10
	<u>\$198,302 72</u>

PITTSFIELD ELECTRIC LIGHT COMPANY.

ASSETS.

Electric plant,	\$21,810 17
Cash on hand,	95 41
Due for light and power,	1,199 50
Carbons on hand,	44 00
Globes on hand,	25 96
Other materials on hand,	120 00
Total assets, as per books of the company,	<u>\$23,295 04</u>

LIABILITIES.	
Capital stock,	\$5,000 00
Notes payable,	3,600 00
Unpaid bills,	4,007 26
Interest due, but not paid,	210 00
Total liabilities, as per books of the company,	\$12,817 26
Profit and loss balance,	10,477 78
	<hr/> \$23,295 04

PITTSFIELD ILLUMINATING COMPANY.

ASSETS.	
Steam plant,	\$12,500 00
Electric plant,	15,000 00
Lines, meters, lamps and globes,	11,826 68
Cash on hand,	23 00
Due for light and power,	2,337 12
Fuel on hand,	44 00
Oil and waste on hand,	35 00
Other materials on hand,	1,755 68
Total assets, as per books of the company,	\$43,521 48

LIABILITIES.	
Capital stock,	\$25,000 00
Notes payable,	12,642 54
Unpaid bills,	2,665 12
Amounts due from the company, not included above,	2,350 56
Total liabilities, as per books of the company,	\$42,658 22
Profit and loss balance,	863 26
	<hr/> \$43,521 48

QUINCY ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.	
Real estate,	\$9,588 14
Steam plant,	10,580 00
Electric plant,	12,555 00
Lines, meters, lamps and globes,	30,926 00
Cash on hand,	2,104 21
Due for light and power,	104 68
Carbons on hand,	35 00
Oil and waste on hand,	48 00
Globes on hand,	29 00
Other materials on hand,	991 00
Horses, wagons, etc.,	395 00
Office furniture,	74 00
Total assets, as per books of the company,	<hr/> \$67,430 85

LIABILITIES.

Capital stock,	\$42,150 00
Notes payable,	18,474 11
Unpaid bills,	5,000 00
Unpaid dividends,	1,050 00
Total liabilities, as per books of the company, . . .	\$66,674 11
Profit and loss balance,	756 74
	<hr/>
	\$67,430 85

SALEM ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$32,721 58
Construction,	82,880 63
Peabody Street plant,	11,920 78
Franchise,	10,000 00
Cash on hand,	15,783 27
Due for light and power, . . . }	5,339 52
Other accounts due the company, }	
Office furniture,	100 00
Investments,	5,000 00
Total assets, as per books of the company, . . .	\$163,745 78

LIABILITIES.

Capital stock,	\$140,000 00
Unpaid bills,	9,081 59
Reserved fund,	4,161 35
Total liabilities, as per books of the company, . . .	\$153,242 94
Profit and loss balance,	10,502 84
	<hr/>
	\$163,745 78

SOUTHBRIDGE ELECTRIC COMPANY.

ASSETS.

Real estate,	\$3,622 91
Steam plant,	9,351 59
Electric plant,	11,929 38
Lines, meters, lamps and globes,	11,665 90
Cash on hand,	517 54
Carbons on hand,	37 50
Oil and waste on hand,	39 70
Incandescent lamps on hand,	15 00
Globes on hand,	19 00
Horses, wagons, etc,	235 00
Office furniture,	54 00
Total assets, as per books of the company, . . .	\$37,487 52

LIABILITIES.

Capital stock,	\$25,000 00
Notes payable,	10,000 00
Total liabilities, as per books of the company,	\$35,000 00
Profit and loss balance,	2,487 52
	<u>\$37,487 52</u>

SOUTH HADLEY FALLS ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$1,249 71
Electric plant,	5,236 59
Lines, meters, lamps and globes,	4,248 82
Due for light and power,	280 50
Other accounts due the company,	309 00
Incandescent lamps on hand,	314 00
Other materials on hand,	400 00
Total assets, as per books of the company,	<u>\$12,038 62</u>

LIABILITIES.

Capital stock,	\$7,000 00
Notes payable,	2,200 00
Unpaid bills,	700 00
Amounts due from the company, not included above,	2,138 62
Total liabilities, as per books of the company,	<u>\$12,038 62</u>

TAUNTON ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$4,000 00
Steam plant,	10,000 00
Electric plant,	14,000 00
Lines, meters, lamps and globes,	10,000 00
Cash on hand,	1,001 55
Other accounts due the company,	10 00
Fuel on hand,	10 00
Carbons on hand,	10 00
Oil and waste on hand,	20 00
Incandescent lamps on hand,	12 00
Other materials on hand,	20 00
Fixtures on hand,	25 00
Total assets, as per books of the company,	<u>\$39,180 55</u>

LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	4,000 00
Unpaid bills,	500 00
<hr/>	
Total liabilities, as per books of the company,	\$34,500 00
Profit and loss balance,	4,608 55
<hr/>	
	\$39,108 55

UNITED ELECTRIC LIGHT COMPANY (SPRINGFIELD).

ASSETS.

Real estate,	\$50,704 67
Steam plant,	39,860 41
Electric plant,	120,205 61
Lines, meters, lamps and globes,	47,023 90
Due for light and power,	10,483 08
Other accounts due the company,	17,446 17
Fuel on hand,	631 20
Carbons on hand,	363 17
Oil and waste on hand,	109 61
Incandescent lamps on hand,	5,344 31
Globes on hand,	144 25
Motors on hand,	6,420 89
Fixtures on hand, station property,	5,186 63
Office furniture,	467 10
Investments,	2,602 69
<hr/>	
Total assets, as per books of the company,	\$306,993 69
Profit and loss balance,	1,593 70
<hr/>	
	\$308,587 39

LIABILITIES.

Capital stock,	\$150,000 00
Notes payable,	130,508 58
Unpaid bills,	26,836 64
Unpaid dividends,	13 50
Amounts due from company, not included above,	1,228 67
<hr/>	
Total liabilities, as per books of the company,	\$308,587 39

WARE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$1,800 00
Steam plant,	3,000 00
Electric plant,	8,300 00
Lines, meters, lamps and globes,	11,199 83
Cash on hand,	1,034 93
Fuel on hand,	27 50
Carbons on hand,	30 00
Oil and waste on hand,	8 50
Incandescent lamps on hand,	37 50
Globes on hand,	1 50
Other materials on hand,	147 34
Office furniture,	15 00

Total assets, as per books of the company, \$25,602 10

LIABILITIES.

Capital stock,	\$15,000 00
Unpaid bills,	9,299 83

Total liabilities, as per books of the company, . . . \$24,299 83

Profit and loss balance, 1,302 27

\$25,602 10

WACHUSETT ELECTRIC LIGHT COMPANY (FITCHBURG).

ASSETS.

Real estate, }	\$66,586 30
Steam plant, }	
Electric plant, }	
Patent rights, }	
Lines, meters, lamps and globes,	68,032 59
Cash on hand,	55 53
Due for light and power,	935 43
Other accounts due the company,	1,000 00
Fuel on hand,	180 00
Carbons on hand,	120 00
Incandescent lamps on hand,	237 50
Globes on hand,	27 20

Total assets, as per books of the company, \$137,174 55

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	33,000 00
Total liabilities, as per books of the company, . . .	\$133,000 00
Profit and loss balance,	4,174 55
	<u>\$137,174 55</u>

WESTBOROUGH ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$5,735 28
Steam plant,	3,652 08
Electric plant,	8,225 04
Patent rights,	4,500 00
Lines, meters, lamps and globes,	10,184 76
Cash on hand,	277 71
Due for light and power,	400 00
Other accounts due the company,	20 00
Other materials on hand,	821 95
Total assets, as per books of the company,	<u>\$33,816 82</u>

LIABILITIES.

Capital stock,	\$17,760 00
Notes payable,	15,000 00
Unpaid bills,	847 82
Total liabilities, as per books of the company,	\$33,607 82
Profit and loss balance,	209 00
	<u>\$33,816 82</u>

WHITMAN ELECTRIC COMPANY.

ASSETS.

Steam plant,	\$1,235 00
Electric plant,	6,135 00
Lines, meters, lamps and globes,	10,611 11
Cash on hand,	3,350 27
Fuel on hand,	721 00
Carbons on hand,	53 90
Oil and waste on hand,	39 61
Total assets, as per books of the company,	<u>\$22,142 89</u>
Profit and loss balance,	199 35
	<u>\$22,342 24</u>

LIABILITIES.

Capital stock,	\$20,000 00
Unpaid bills,	2,342 24
Total liabilities, as per books of the company,	<u>\$22,342 24</u>

WOBURN ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$16,761 53
Steam plant,	16,231 67
Electric plant,	30,212 18
Patent rights,	6,000 00
Lines, meters, lamps and globes,	55,609 15
Cash on hand,	255 77
Due for light and power,	1,783 07
Other accounts due the company,	2,539 37
Fuel on hand,	1,500 00
Carbons on hand,	50 00
Oil and waste on hand,	40 00
Incandescent lamps on hand,	200 00
Globes on hand,	15 00

Total assets, as per books of the company,	\$131,197 74
Profit and loss balance,	1,579 85
	<u>\$132,777 59</u>

LIABILITIES.

Capital stock,	\$60,000 00
Bonds issued,	35,000 00
Notes payable,	26,040 37
Unpaid bills,	11,737 22

Total liabilities, as per books of the company,	<u>\$132,777 59</u>
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WORCESTER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$24,163 00
Steam plant,	19,990 00
Electric plant,	32,587 11
Lines, meters, lamps and globes,	42,760 81

Cash on hand,	\$1,243 15
Due for light and power,	5,446 44
Other accounts due the company,	81 12
Fuel on hand,	115 00
Carbons on hand,	567 00
Incandescent lamps on hand,	37 50
Globes on hand,	250 00
Other materials on hand,	3,181 45
Fixtures on hand,	1,120 43
Office furniture,	262 73

Total assets, as per books of the company, . . . \$131,805 74

LIABILITIES.

Capital stock,	\$125,000 00
Unpaid bills,	3,374 36

Total liabilities, as per books of the company, . . \$128,374 36

Profit and loss balance, 3,431 38

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SIXTH ANNUAL REPORT
OF
THE BOARD
OF
GAS AND ELECTRIC LIGHT
COMMISSIONERS.

OF THE
Commonwealth of Massachusetts.

JANUARY, 1891.

BOSTON :
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.

1891.



Commonwealth of Massachusetts.

The Board of Gas and Electric Light Commissioners respectfully submits its Sixth Annual Report.

There was a change in the Board in July last, at the expiration of the term of Maj. Edward T. Rowell, who had been a member of the Board since its organization. His associates desire to record their high estimation of his services.

The last year seventy-three gas companies and sixty electric light companies made returns. As twenty-one of the gas companies were also engaged in the business of furnishing electric light, with a probability that the number will increase, it was deemed best to issue a form of return adapted to both gas and electric companies. It was found that thereby a repetition of the balance sheets, profit and loss accounts, and of much other matter, could be saved.

The law requires the companies to make their returns to the Board on or before the second Wednesday of September for the year ending the thirtieth day of June previous. The time thus given is ample, but only twenty-seven gas companies and fifteen electric companies seasonably complied with the statute. The suggestion is renewed that the Legislature consider the expediency of affixing a penalty for delay hereafter in this respect. The present remedy is by reporting the delinquency to the Attorney General, who proceeds before the courts with the request that the companies be enjoined from doing business until they shall have made report. Process has been instituted against fourteen companies, but only after two urgent notices sent by the Board, each company had failed to bring a response. A fine for each day's delay, as in the case of railroad companies, would doubtless

be effective, and thus allow the time needed to correct and tabulate the numerous details of the returns. If the returns were promptly filed, the time left for compiling and printing the data would be sufficient; but, with the tardy practice of the companies, the Board is now, as formerly, unable to have its annual report seasonably printed for the use of the Legislature.

The Board, in its examination of the condition of companies, has discovered some instances of an unlawful increase of capital stock, and in two cases the shares so issued have been called in and surrendered. Other companies have sought its advice concerning the legality or wisdom of enlarging their capital. The surrender or cancellation of shares is sometimes a hardship on the owner, and always annoying. The amount of capital stock is usually of vital consequence to the consumers or patrons of a company. It should be kept at the lowest practical point, as the best guaranty for cheap light, as well as for reasonable dividends. Some of the companies, managed by men of a speculative turn of mind, manifest a desire that every expenditure for construction or improvement, or a rise in the market value of plants, shall be represented by interest-bearing dividend scrip or by new shares of stock, on which it is proposed to pay the usual dividends, at least until the stock is palmed upon innocent buyers. To avoid disappointment and loss by such stockholders, whenever the law shall be applied regulating the price of light, which intelligent consumers ask to have fixed on the basis of actual or necessary cost and reasonable dividends, it is suggested that the issue of such scrip be prohibited, and that the prior assent of the Board to a new issue of stock be required by statute.

The question of consolidation of gas and electric light companies has been brought before the Board during the year in two very illustrative cases, which arose on the petitions of the North Adams and Worcester gas light companies. A statement of the facts and the views of the Board will be found in the sections printed in a later portion of the report. Such combinations ought not to be allowed to combine unless it is made probable that they and the community will thereby gain some mutual benefit, and it is clearly proven that the consumers will receive no detriment. These two cases presenting such different

conditions clearly show the wisdom of referring to some disinterested tribunal the proposals for such consolidations.

As questions were pending before the Attorney-General at the time the blank returns were distributed in June, concerning the legal status of the Suburban Light and Power Company, none were sent to that company. The Attorney-General having near the close of the year declined to intervene or allow a process in his name against the company, a description of the company and its business will be incorporated in the report, so far as feasible, in the brief time. The principal facts in relation to the company, as understood by the Board, will be found in the report under the title "Violation of Laws."

Since the repeal by the last Legislature of the limit of carbonic oxide in gas, there has been no legal obstacle against the manufacture of water gas. Before the repeal there were both coal and water gas in Boston proper, the Charlestown district, Worcester, Fall River and Spencer. In those places the two gases were mixed. In Amesbury and Cottage City there were only water-gas plants. The gas companies in Lawrence and Pittsfield have recently added water-gas works. In Athol, where a water-gas plant was formerly used, only coal gas is now made. During the latter part of the year, owing to the scarcity of gas coal, some of the companies have made a larger portion of water gas than formerly.

Notwithstanding the steady progress of electric lighting, it still appears that there has been in a large majority of places a gradual increase in the consumption of gas. It is only by continued observation and numerous practical tests that the comparative cost, value and various uses of electricity and gas for light can be finally determined. As yet, the cost of gas can be estimated more closely than the cost of electric light. But the study now devoted to the subject by electrical engineers, the information and details called for by the Board and cheerfully furnished by the companies, it is hoped will soon supply data for calculating with more accuracy the cost of electric light. There has been considerable improvement in the returns of the electric companies, and most of them have shown a desire to perfect their system of keeping accounts.

Electric meters have become more general in use, although little has been accomplished during the year in lessening their cost. The Board continues to receive inquiries in regard to the real candle power of the different electric lights, and recommends that it be given the power in its discretion at any time to obtain through a competent expert a test of the candle power of electric lights. Such tests would be important, if not indispensable, in cases where the Board is called upon to fix the price of electric light. The further suggestion is respectfully submitted, that it would be a convenience if the report of the State inspector of gas and gas meters could be combined with the report of the Board. It is believed that such a provision would meet the approval of that official.

The recommendation is renewed that the law should be changed so as to allow a larger appropriation for the incidental expenses of the Board, which have necessarily increased since it was given the supervision of electric light companies.

The Merchants' Electric Company in February last brought process in the Supreme Judicial Court against the Board, for the purpose of setting aside its decision rendered on the petition of the Clinton Gas Light Company, appellant, which may be found in the fifth annual report of the Board, page 93. The proceedings are still pending in court.

Petitions were brought by F. M. Gilley and W. S. Moody that the Chelsea Gas Light Company be directed to supply them with incandescent electric light. After informal hearings the company consented to comply with their requests. By another petition on which a decision has not yet been rendered, the Board is asked to require the same company to furnish electric light at all hours of the day.

Some surprise has been privately as well as publicly expressed, that the Board has not assumed to regulate the price or quality of light as often as the conditions might seem to warrant. By reference to the statute on the subject (chapter 314, section 9, Acts of 1885), it will be seen that the Board cannot act in the premises except "upon the complaint in writing of the mayor of a city or the selectmen of a town in which a gas company is located, or of twenty consumers of such company." The provi-

sion by a later statute was also made applicable to electric light companies. The question of fairness of price cannot be hastily passed upon, for it involves a thorough study into the history and affairs of a company; and the cause of a defect in quality, and the remedy, can often be ascertained only by careful inspection and examination of the various parts of a plant, the materials used, and the methods of manipulation. It is proper that proceedings in such cases should be begun by written complaint. The suggestion has been made to the Board that the number of petitioners required should be lessened, and the matter may be deemed worthy of attention.

NEW ENGLAND SHOE & LEATHER ASSOCIATION AND DE L.
SHEPLIE, *et al.*, PETITIONERS.

The New England Shoe and Leather Association, owning the building numbered 114 and 116 on Bedford Street, and De L. Sheplie and George E. Henry, lessees of the building numbered 129 to 137 on Kingston Street, both situated in Boston, present separate petitions praying that the Edison Electric Illuminating Company of Boston may be ordered to supply them with electricity for lighting their respective buildings. The petitions are brought under the provisions of section 5, chapter 346, Acts of 1886, which were extended by section 2, chapter 382, Acts of 1887, "so as to include and apply to all companies engaged in the manufacture and sale of electric light." The petitioners and the Edison Company were represented by counsel, and the cases heard together.

The first-mentioned section is as follows: —

SECT. 5. Upon the petition in writing of any person who has a residence or place of business in a city or town where a company is engaged in the manufacture and sale of gas for lighting or for fuel, and who is aggrieved by the refusal or neglect of such company to supply him with gas, the board of gas commissioners shall have authority to issue an order directing and requiring such company to supply such person with gas for either of said purposes, upon such terms and conditions as are legal and reasonable. Said board shall not issue its order under this section except after a notice to such company, directing it to appear at a time and place therein named, to show cause, if any there be, why the prayer of such petition should not be granted.

Each of said buildings contains steam power and an electric light plant with incandescent lamps. The petitioners desire the current from the Edison wires, now laid through said streets, when the dynamos in the buildings are not running, and especially after six o'clock in the evening.

The Edison company object to supplying the current, chiefly on the ground that the buildings are not furnished with Edison lamps. It put in evidence a contract dated Jan. 29, 1886, with the parent Edison company, whereby, as it claims, it agreed not to use or supply current for any but Edison lamps. The cases will be considered on the assumption that the contract contains in effect such agreement.

As the contract was made prior to the enactment of the statute of 1887, above cited, it is contended that the statute would be a "law impairing the obligation of contracts," if it be construed as giving authority to direct a supply for other lamps in violation of the said contract. This raises an important question, which deserves careful consideration. The Boston Edison company was organized under the Public Statutes in 1885, for the purpose, as expressed in its charter, of a "general business of producing, using, applying and selling light, heat and power generated by means of electricity, and the business of producing, applying and selling electricity, magnetism, steam and other forces and energies for practical service for light, heat, power and other uses."

Charters of corporations granted in the State since 1830 have been subject to amendment and alteration. But in the adoption of the Public Statutes of 1882 the Legislature made a more specific reservation of its powers in reference to certain corporations in the last clause of section 2, chapter 105, which provides that "all corporations organized under the general laws shall be subject to such laws as may be hereafter passed and applicable thereto."

It is evident that the Edison company, when it accepted its charter, had full knowledge and notice that it would be subject to the laws which the Legislature might subsequently pass in relation to such corporations. Admitting that the statute under which the petitions are brought is one which could be lawfully enacted and made binding upon then existing electric lighting corporations in

general, is it reasonable that a company should shield itself from its operation by entering into a contract in advance that it will not do the things which otherwise would be imposed upon it by the law? If this can be done, a ready way is open by which the burdens of proposed legislation can be avoided.

It has been determined repeatedly by our highest courts that the provision in the United States constitution, prohibiting a State from passing any "law impairing the obligation of contracts," does not diminish the police powers of the Legislature. Those are inherent in the State government, and in their exercise it is the right and duty of the State to pass laws securing to its citizens, among other things, safety and convenience. It would seem a proper use of the power, greatly for the protection and benefit of consumers and the public, that a company chartered for the express object of selling light or electricity, and given the privilege of occupying the highways with its wires and structures, should be under obligation to furnish the same when it can conveniently be done, thereby saving the necessity of encumbering the streets by numerous and dangerous wires, the laying and repair of which so frequently interrupt public travel.

The people obtain both greater safety and convenience by the enactment and application of the statute; indeed, it is difficult to suppose a more apt and reasonable police regulation. The legislation of recent years, providing for the supervision of such corporations by State officers, and placing upon the companies the duty of supplying all within proper limits, has changed the character of these corporations. They are now in many respects public rather than private bodies; while their duties are increased, the statutes by other provisions guard the companies against needless and injurious competition. The burdens must accompany the benefits. All persons who contract with corporations of this kind are presumed to do so with a knowledge of the laws, and contracts must be subordinate to the rules and obligations which the Legislature may from time to time adopt, in the exercise of its reserved powers.

To require the company to supply other lamps than the Edison does not infringe or violate any of its chartered rights, one of the purposes expressed in its organization and charter being "selling

electricity, magnetism, steam and other forces and energies for practical service for light."

It was further stated by the Edison company that the lamps installed in the buildings were of different voltage, not perfectly or with the best economy adapted to the current of the Edison street circuit. If, however, any loss to the petitioners in the life or illumination of the lamps should result from this cause, it will not be fairly attributable to the Edison company, and the company will suffer no damage, as the amount of current supplied to its customers for light is measured by meter, and its charges for the same are based on the quantity so indicated.

An additional reason given by the Edison company why it ought not to be compelled to connect with the building of the New England Shoe and Leather Association was, that the plant in the building is of the two-wire system, while the street circuit of the company has three wires. The experts who testified at the hearing substantially agreed that an even distribution of lights on the two sides of a three-wire circuit is required for its proper operation; otherwise some lights will be more brilliant than others, and the service unsatisfactory. As the building is six stories in height, with lamps on each floor, it was suggested that the lamps in a part of the stories could be connected with one side and the rest with the other side, of the circuit.

A more minute division, were it not for the expense of alterations, would doubtless be desirable, there being over a thousand lamps throughout the building. The position of the Edison company was, that it is advisable to divide the lights of a room, or even of a chandelier, which has any considerable number of lights, between the two sides of the circuit, and that such practice ought to be followed as closely as possible.

There was evidence that the architects were notified in advance that three wires would be necessary if it was the intention to connect with the public system. This information, unfortunately, did not come to the knowledge of the owner of the building. It seemed to be conceded that the wiring with three wires, while the building was in process of construction, would have cost no more than with the two wires.

The Edison company, if its other objections should be found

invalid, indicated a willingness to supply the building, in view of the exceptional circumstances of the case, provided the three-wire system shall be carried to the point of distribution on each floor. The Board believes that alterations to that extent at least should be made, and that then the company ought to connect its wires with those in the building.

Orders are therefore adopted, in the first case with the qualification mentioned, directing the Edison company to supply the petitioners with electricity for lighting their respective buildings.

AUTHORIZATION OF GAS COMPANIES TO FURNISH ELECTRIC LIGHT.

The Danvers Gas Light Company, which was authorized by the Board in 1889 to furnish electric light, has erected no plant for the purpose, and the authority has therefore become void.

In the following cities and towns the companies supply both gas and electric light: —

Amherst,	Fitchburg,	North Adams,
Athol,	Holyoke,	Southbridge,
Beverly,	Lawrence,	Spencer,
Brookline,	Lee,	Stoughton,
Charlestown,	Lynn,	Wakefield,
Chelsea,	Newburyport,	Waltham,
Clinton,	New Bedford,	Webster,
Cottage City,	Newton,	Westfield.

Only two petitions have been acted upon the last year, that of the North Adams Gas Light Company, which was allowed, and that of the Worcester Gas Light Company, which was refused. A report of each case follows.

NORTH ADAMS.

On the petition of the North Adams Gas Light Company for authority to furnish electric light and power, and in accordance with the notice issued in like cases, a hearing was given in North Adams. The petitioner and the North Adams Electric Light and Power Company were the only parties represented. The stockholders of the gas company had passed the requisite vote to engage in the electric business. The electric company expressed a willingness to sell its property to the gas company in case a union of the business should be deemed desirable. The capital of

the electric company was \$7,500. Its plant, consisting of the electrical apparatus and an engine, had cost between \$12,000 and \$13,000. It owned no steam plant, but hired its power. The gas company had \$50,000 in capital stock, and a surplus of \$19,000, of which \$7,000 was in cash. The population of the town was estimated about 15,000. There was vacant land at the gas works suitably and conveniently located, to which the petitioner proposed to move the electric machinery if allowed to engage in the business. It was stated with confidence by the representative of the petitioning company that no increase of its capital stock would be necessary in carrying on both kinds of lighting. Before the case was finished, the gas company or its shareholders had purchased all the stock of the electric company. At meetings of the stockholders, duly called for the purpose, votes were unanimously passed empowering the directors of the respective companies to effect a transfer of the franchises and property of the electric company to the gas company, and agreements of purchase and sale were executed. The size of the town, the limited amount of business of each company, the incomplete condition of the electric works, the reduction of capital by the combination, and the fact that the two works would be brought together, were given and considered among the substantial reasons why the gas company could produce electric light more cheaply than could a separate electric company. The petition was allowed. The electric works have been moved to the land of the gas company, and have there been completed and considerably enlarged. There has been no increase of the capital stock of the gas company, and its treasurer informs the Board that there is no likelihood of its being changed from its present amount.

WORCESTER.

This was an application by the Worcester Gas Light Company, under the Acts of 1887, chapter 385, for authority to engage in the business of generating and furnishing electricity for light and power, in all the territory in which it is authorized to supply gas. A public hearing was given in Worcester. The petitioner and the Worcester Electric Light Company were represented by counsel, the latter in favor of the petition. It appeared in evidence that

the vote required by statute had been passed by the gas company, that it had also voted to purchase the property of the electric light company, and that the latter had voted to sell all its property, rights and franchises to the former. Counsel for the petitioner, at the hearing, informed the Board that it was the understanding between the companies that the gas company should take all the stock of the electric company, 2,000 shares, and issue therefor to the shareholders of the latter company 2,000 shares of stock of the Worcester Gas Light Company. From the contract of sale which was subsequently submitted, it appeared that the gas company was to pay to the electric company the proceeds of the sale, at auction, of 2,000 shares of the stock of the former, for the entire property and franchises of the latter, and to assume its debts. The present capital of the gas company is \$500,000, and of the electric light company \$200,000, and the combined debts considerably exceed \$100,000. It appeared that the market value of the gas stock was about 165, and of the electric not over 140, but little of either being upon the market.

Very little other evidence was introduced, and the petitioners seemed to rest their case chiefly upon the ground that both companies had voted for the consolidation, and that no one appeared at the hearing to oppose it.

Such reasons the Board has not heretofore regarded as sufficient. In considering one of the earliest cases presented, the petition of the New Bedford Gas Light Company, it says: "It seems to be the view of the petitioner that the consideration of its request was mostly a formal matter, and that, upon conforming to the conditions made by law, its request would be granted as a matter of course. Upon a careful review of the situation, the Board was unable to agree with this view of the statute; and, as no effort has been made to show any benefit likely to accrue from the consolidation proposed, there seemed no sufficient reason for granting the prayer of the petitioner."

From observation since that time, the Board has been confirmed in its position. Consolidation is not always, or necessarily, a benefit; it may or may not be. Its expediency must depend entirely upon local conditions. They alone must determine whether an advantage is to be gained, either by the public or the

stockholders; whether, in fact, it may not bring serious injury to all concerned. Such a course may develop activity in the stock of the two concerns, usually increasing its amount or apparent value, and thus giving to some an opportunity for profit.

Any such benefit must be for the few only, and cannot be influential in deciding a question of this importance. The cases heretofore acted upon, have been either in small towns, or where special conditions gave substantial promise of some advantage to the companies or consumers, thereby rendering such a union expedient or necessary. The Board has never before been asked to approve a consolidation in any of the larger cities of the State, and is not aware that it is desired by any other companies similarly situated. The population of Worcester is about 85,000; there is no city in the United States of equal size in which the lighting is done by a single company, nor are such combinations generally favored by those best acquainted with the business.

The case presented by the petition is a new one. It is not to be overlooked that the interests of the companies and consumers have much in common. If a consolidation shall bring increased strength and a larger measure of prosperity to the corporations, some share in these advantages will be received by the community; but if instead it is to bring weakness, the public is sure to be injured through failure to secure the best service and the lowest rates.

The decision of a question of so great importance cannot rest upon the few suggestions made at the hearing. The Board has therefore endeavored to make a careful study of the two companies; their history, and the local conditions affecting them; and, as a part of this work, a thorough examination of the records and accounts of both has been made.

The electric light company was organized early in the year 1884, and has been engaged in business continuously since that time. A large proportion of its business has been, and is to-day, arc lighting. It has just completed the construction and equipment of a plant, costing, for land, building, appliances, and machinery not electric, about \$125,000.

The building is of ample size for all probable needs of the city for some years to come. Every advantage in construction, known

to the best engineering skill, seems to have been employed, and all appliances rank with the best. It is situated nearly two miles by the nearest travelled road from the gas works, and it is not proposed to change the location of either plant.

From a careful study of its records and accounts, it seems that its affairs have been managed with strict economy; its policy has been conservative, well calculated to give permanence to the investment, and free from speculative features. Its directors include well-known and successful business men, — men who have been in a special degree identified with the city's growth and prosperity.

The Board has been unable to find that any appreciable saving in the conduct of its affairs, or in the manufacture of its products, could be secured by the transfer of this business to the gas company. There is no article used in common in the manufacture of the two kinds of light; even the coal is different in kind, and bought in separate markets.

It appears from the evidence at the hearing that coke for fuel is available from the gas works only a few weeks in the year, and then to but little extent; and it is probable that any advantage accruing from this would be more than neutralized by the necessity for transporting it between the stations. The wide separation of the two plants, which are to remain as they are now, the different training needed, and the large volume of each business, would render necessary separate superintendents and employees.

Either company is large enough to employ first-class talent to control its affairs, and the best results will be most likely secured by superintendents in each business with a special training therefor.

Although the management of the electric light business has been able and successful, it has not been costly, and it is not probable that this labor could be added to the present burdens of gas management, without some additional compensation in the near future.

Since 1884 the business of the gas company has greatly advanced, its output in the last three years having increased nearly fifty per cent. The present annual dividends of the company are eight per cent., and, with the exception of a year and a half, have not for many years been below that rate. The electric companies'

dividends have ranged from three to seven per cent. annually, averaging 5 per cent.

The provisional contract between the two companies, and their indebtedness, would probably lead to an additional \$300,000 to the present capital of the gas company; and \$100,000 more is not a large estimate for such extensions of the incandescent system as are likely to be imperatively demanded.

Probably the stockholders in the gas company do not expect to receive reduced dividends in consequence of the consolidation. But, with no facilities for reducing the cost of electric light, how can this rate be maintained on the enlarged capital? Apparently either by advancing the prices or lessening the service, or by using the surplus profits of the gas company. Either course is obviously against the public interests; the former would be adopted only with reluctance, the latter ought not to be allowed. If, on the other hand, the gas company does expect and would be satisfied with smaller dividends, why should not the community receive the benefit in a lower price of gas?

It was the duty of the Board, three years ago, to call attention to the need of large improvements and additions to the works and property of the gas company. The extraordinary increase of business since that time has made this much more imperative. This has been fully appreciated, and much has been already done, and much yet remains to be done. A comprehensive scheme of improvements has been entered upon, and, in the interests of the company and consumers, ought to be pursued.

In the opinion of the Board, there will be ample demand for the expenditure of any surplus, in adding strength to the corporation, and securing to the consumers of gas that improvement in service and reduction in price to which they will be properly entitled. It is not to be forgotten that the primary purpose of incorporation is profit. This impels the management to such a course as will make that profit as great as possible; the same end is sought in consolidation. The desired income would not be sought, however, in this case, and in the present condition of the two companies, in the direction of electrical development; nor is there any well-founded prospect that it would be in the near future.

It would be for the immediate interests of the consolidated

companies to increase the sale of gas, rather than of the electric light. If it did develop and push the electric light, it would be with reluctance, by reason of the expenditure required, and when the demand was so imperative that it could not be refused.

Such a course could not be long satisfactory to a community of the size and character of Worcester. Experience shows that it would arouse and encourage, although it might not justify, the demand for a competing lighting company, or for the assumption, by public authority, of the business. Although either course might bring on serious injuries, these might seem to the public mind to be more easily endured. In this case the field for each company is ample. Each has been successful, and is likely to so continue, with proper management.

It was admitted that thus far there had practically been no competition between the two companies. Light has sometimes been supplied below cost or without profit in other places, in order to compel a combination of companies; if, however, it is understood that these corporations are to remain separate, the managers will not have this inducement to indulge in a needless waste of capital. Only a wholesome rivalry may be expected. The Board can see no valid reason why, pursuing their separate courses, the two companies will not be able to supply their respective customers with lights of as good quality, and at as low prices, as the same service is performed elsewhere, under the same conditions, or could be here, after consolidation.

For the reasons stated, the Board deems, for the best interests of all concerned, both consumers and stockholders, that the consolidation should not take place, as requested.

The petition is therefore dismissed.

CHELSEA GAS LIGHT COMPANY, APPELLANT.

Appeal by the Chelsea Gas Light Company from the decision of the mayor and aldermen of the city of Chelsea, granting to the American Fuel Company permission to lay gas pipes in certain streets of the city. The first hearing on the petition was Nov. 18, 1889. The appellant was represented by counsel, the city by its solicitor, and the American Fuel Company by its president and vice-president. It was stated, in behalf of the Fuel company,

that it had already laid its pipes in some streets, and that its works were nearly completed. It claimed that it was able to produce gas by the use of a patent process, by passing steam and crude petroleum, and air under pressure, through hot iron pipes; that, after the pipes had been once heated by coal or wood, the manufacture would be continuous, using for fuel under the pipes a portion of the gas so made; but that it was not then known what percentage of the gas made would be needed for fuel in this continuous process. It was also said that the pipes contained discs of different metals, so combined and arranged that heat would be generated by electricity as the oil and steam passed along through the pipes. The iron pipes mentioned were for a distance horizontal, and then perpendicular.

As it was expected that the plant would be finished and in operation in the course of two weeks, the hearing was postponed, at the request of the Fuel company, until December 16. The Board expressed the wish that meanwhile some practical tests might be made as to the value of the gas for fuel under boilers, that being the immediate use for which it was intended.

On the day of the adjourned hearing the works of the Fuel company were visited. The representative of the company informed the Board that they had just been completed, and that a thousand feet of gas had been manufactured, but that no test or analysis of the gas had been made. It was admitted that the works were somewhat different from those built in a former experiment, which works had been accidentally destroyed by fire.

The company failing to offer further evidence, the case was again continued, to be called up again by the Board if it so desired.

Shortly after, at the request of the Board, and with the consent of the Fuel company, the works were examined, and a sample of the gas taken and analysed by the State inspector of gas. The analysis showed the following percentage by volume:—

Illuminants,	14.91
Marsh gas,	10.67
Hydrogen,	4.25
Carbonic oxide, . . . . .	.89
Nitrogen,	54.76
Oxygen,	12.52
Carbonic acid,	2.00
	<hr/> 100.00

The State inspector, in commenting on the analysis, said: "Whatever action the steam may have is almost entirely mechanical, as it furnishes only between one and two per cent. of the total per cent. of the total volume of the gas. Nearly twenty-nine per cent. of the gas comes from the oil used, and over sixty-nine per cent. is furnished by the air. The advantages of using such a large amount of air in the manufacture of the gas are not obvious."

Inquiries were made from time to time, but the Board did not learn that the company was making any substantial progress. The case was assigned for further hearing June 23, at which a contractor of considerable experience in the building of gas works, called by the Fuel company, testified that many radical changes in the works must be made before they could be operated successfully. An enumeration of the alterations said to be necessary showed that the works when remodeled would be essentially new. At this time the hearing was closed.

In the consideration of the case the Board was unable to discover evidence that any of the heat was generated by electricity, as claimed; while a small quantity of gas was made, there was no proof that at those works it could be manufactured on a paying basis for commercial purposes. The failure to exhibit any practical tests, the quality of the gas as shown by the analysis, and the numerous alterations said to be advisable in the construction of the works, led to the conclusion that the process in this form was experimental and unsuccessful.

The Board was of the opinion that experiments of this nature should be made on private land, and that the public streets ought not to be used for the purpose. Furthermore, it being proposed to remodel the works throughout, the aldermen would be fairly entitled to pass anew upon the question of their use. The appeal was therefore sustained, and the permission of the mayor and aldermen revoked.

CITIZENS' GAS LIGHT COMPANY OF READING, SOUTH READING AND
STONEHAM, APPELLANT.

Appeal by the Citizens' Gas Light Company of Reading, South Reading and Stoneham from the refusal of the selectmen of Wakefield to allow it to erect poles and run wires.

At the hearing on the appeal which was held in Wakefield, the Wakefield Electric Light and Power Company, the People's Electric Light and Power Company, and two citizens, appeared as remonstrants. The chairman of the selectmen stated that he was present in the interest of the town, but not for the purpose of showing a preference toward any of the interested companies.

The gas company, Dec. 16, 1889, was authorized under chapter 385, Acts of 1887, to furnish electricity for light and power, after a prolonged public hearing, which was attended by the parties in interest, and a considerable number of citizens, a full account of which was given in the fifth annual report of the Board. It was agreed that the evidence produced at that hearing might be considered, so far as applicable, as given in the present case. As the situation of the various parties in interest and the facts then shown have not materially changed, it is thought unnecessary to repeat what was stated in the report above mentioned. Since the gas company received authority to supply electric light, the People's company has pressed its request for permission to erect poles and wires in the streets; but no such permission has been given. There was evidence, however, that some of the selectmen indicated a willingness to grant the request, had not a citation from the superior court, which they regarded as an injunction for the time being, been served upon them.

At the beginning of the hearing, counsel for the People's company filed a motion that the appeal be dismissed on the ground that the gas company, having received authority from this Board to furnish electricity, under chapter 385, Acts of 1887, cannot appeal from the decision of the selectmen, refusing to give consent in writing to erect any poles and wires under the provisions of said chapter.

The right of appeal by the gas company was the chief question presented and argued by counsel. For the proper understanding

of the issue, it is well to consider the form of the petition to the selectmen, the course of proceeding, and the vote of the selectmen thereon.

The petition was as follows : —

To the Selectmen of the Town of Wakefield, Mass.

Respectfully represents the Citizens' Gaslight Company of Reading, South Reading and Stoneham, that it is duly authorized by vote of its stockholders and the Board of Gas and Electric Light Commissioners to engage in the business of generating and furnishing electricity for light and power in the town of Wakefield.

Wherefore it prays that it may be authorized to lay or erect wires over or under the streets, lanes and highways of said town, for the purpose of carrying on said business, and for the erection of poles on said highways, and for making such other erections as may be necessary.

W. E. BIDDLE,

President Citizens' Gaslight Company.

DEC. 18, 1889.

The motion to dismiss assumes that the decision was made under chapter 385, cited in the motion. It is important to inquire whether the petition was brought under that chapter (385) or by virtue of section 3, chapter 282 of the Acts of 1887. It will be noticed that the petition does not request permission to erect poles in definite localities, or to occupy any particular street or streets with poles and wires ; but it is in form a general application for permission to lay or erect wires over or under the streets, made by the gas company for the purpose of carrying on its business, following closely the language of said section 3.

The selectmen published notices for a public hearing on the petition, in the manner in which notices are usually given in the town ; the hearing was held in accordance with the notice, and was attended by various parties in interest. Thereupon the selectmen passed the following vote : —

Voted, To decline to grant the petition of the Citizens' Gaslight Company of Reading, South Reading and Stoneham, for a location on the streets of this town to erect poles and string wires to carry on an electric light business.

There were at least three companies organized for the purpose of supplying electricity for light and power in Wakefield. Would

it not be a plain violation of the letter and spirit of section 3 of said chapter 382 for the selectmen, without a public hearing, to allow some other company to erect wires in the streets? The selectmen seem to have taken it for granted that a public hearing was necessary, and accordingly issued notices therefor.

In a town where a company is already engaged in supplying light and power, or organized for that purpose, another company, wishing to engage in a like business there, must first apply to the selectmen for permission to use the streets. If the consent be refused, the company asking it may appeal to this Board; or, if the selectmen give their consent to the company applying therefor, the other company may appeal, and the decision of the selectmen can, in either case, be affirmed or reversed. The principle and reason of the statute apply equally well if one of the companies is a gas company authorized to furnish electricity.

After a company has received this general consent, whether from the selectmen or from this Board on appeal, it is still requisite that it obtain from the selectmen their written specification, denoting the streets and the places where poles may be set.

The consent required by section 3, chapter 382, above mentioned, may be indicated by vote of the selectmen, and need not be in writing; whereas consent to the occupancy of any designated streets and of particular places in the streets by poles and wires must be in writing, as provided by Public Statutes, chapter 109, section 3, and by section 4 of chapter 385, referred to in the motion to dismiss.

The refusal of the selectmen, as appears by their vote, was general in its scope, denying the gas company the right to erect poles and string wires on the streets for the purpose of carrying on an electric light business.

The conclusion follows that the proceeding in question must be treated as taken not under chapter 385, but under chapter 382 of the Acts of 1887; and that consequently the gas company has the right to appeal under section 5 of the latter act, in like manner as either of the other companies in interest might have done, and as the counsel who made the motion to dismiss stated that he should have claimed the right to do, had the selectmen given an opposite decision. The motion to dismiss is therefore not allowed.

The two citizens who appeared as remonstrants desired that the town should do the electric lighting, and one of them thought the land of the gas company unsuitable for an electric light plant.

The same reasons which induced the Board to authorize the gas company to engage in electric lighting necessarily lead it to reverse the decision of the selectmen. Consent is therefore given to the gas company to lay or erect wires over or under the streets, lanes and highways of Wakefield, for the purpose of carrying on the business of furnishing electricity for light and power.

An electric plant has since been erected at the works of the gas company and the company has received locations for its poles.

VIOLATION OF LAWS.

Notices have been sent to the Attorney-General, in compliance with the statutes, of the following alleged violations of the laws:—

The Milford Gas Light Company, in issuing stock in violation of section 18, chapter 105, and section 39, chapter 106, of the Public Statutes.

The Suburban Light and Power Company, by the erection of wires across the streets of Boston for the purpose of carrying on its business, without the consent of the mayor and aldermen.

The Citizens' Gas Light Company of Quincy, Gardner Gas Light Company, Middleborough Gas and Electric Company, Lee Electric Company, Adams Electric Light and Power Company, Edison Electric Illuminating Company of Lawrence, Middleborough Electric Light and Power Company, Milford Electric Light and Power Company, North Attleborough Steam and Electric Company, Pittsfield Illuminating Company, Union Electric Light Company of Franklin, United Electric Light Company of Springfield, Ware Electric Light Company, and the Weymouth Light and Power Company, in not making returns to the Board, as required by law.

The following are the main facts relating to the alleged violation of law by the Suburban Light and Power Company, above mentioned:—

The Brookline Gas Light Company, June 10, 1887, filed its petition with the Board, under chapter 285, Acts of 1887, for

authority to furnish electric light and power. The company was then, as now, supplying gas in Brookline, in that part of Boston formerly Brookline, and in that part of Boston formerly Brighton. The Suburban Light and Power Company, incorporated in this State Oct. 16, 1886, "for the purpose of furnishing electric light and power," and located in the city of Boston, was then supplying electric light in Brookline and Brighton. It had been granted pole locations in the fall of that year in Brighton, and in Brookline Avenue, which lies in territory formerly Roxbury. The case was heard by the Board, and the gas company was informed that its petition would not be favorably considered unless it purchased the franchise and property of the Suburban company. By authority of the stockholders the two companies made a contract in writing, Oct. 5, 1887, whereby the Suburban company agreed, on payment to it by the gas company of \$92,000, to "convey to said Brookline Gas Company, in due form, all and singular its property, licenses, rights, privileges and franchises of every kind."

The contract was produced before the Board, and thereupon authority was given the Brookline Gas Light Company to supply electric light and power in the territory where it was supplying gas.

All the stock of the Suburban company was assigned to the gas company about Nov. 14, 1887. The gas company paid the Suburban company the \$92,000, took possession of the property mentioned in said written contract of Oct. 5, 1887, and entered upon and continued the maintenance and operation of the electric plant, lines and lights which had been operated and maintained by the electric company.

There was no meeting of the directors or stockholders of the Suburban company between Oct. 12, 1887, and Nov. 25, 1889; no business was done by the company meanwhile, and no return was made by it to the tax commissioner or secretary of State in 1888 or 1889. The name of the company has not been included in the list of electric light companies in the annual reports of the Board. The schedule annexed to the bill of sale from the Suburban company to the gas company, bearing date Oct. 15, 1887, which the Board saw for the first time early in 1890, does not enumerate all the property covered by the agreement of Oct. 5, 1887, above

mentioned; but the president of the Suburban company reported to his directors, Dec. 14, 1887, that "the Suburban Light and Power Company was purchased on November 15 for the price agreed upon, viz., \$92,000; that all the certificates of stock had been transferred to the Brookline Gas Light Company, together with a bill of sale of all the property (personal), and a deed signed by the president and treasurer of the Suburban Light and Power Company, who were duly authorized to sign for the company."

The treasurer of the Brookline Gas Company, in making the return of that company, May 8, 1888, wrote the tax commissioner that "the Suburban Light and Power Company was purchased in November, 1887, and the enclosed return is that of the combined companies."

The Board understood that the Suburban company had been practically merged or consolidated with the gas company. But in November, 1889, the Brookline Gas Light Company sold and transferred the stock of the Suburban company for \$8,000, took from the new holders of the stock a lease of the poles and wires in Brighton for ninety-nine years at a yearly rental of one dollar, released the Suburban company from executing any further conveyances under the said agreement of Oct. 5, 1887, and the latter company agreed not to do an electric light and power business in Brookline. It was also agreed between the two companies that the \$8,000 should be returned by the Brookline Gas Light Company in case the court should finally hold that the Suburban company had no legal right to do an electric lighting business in Boston.

In January, 1890, the Suburban company filed with the secretary of State a certificate of condition for 1889, and paid the State treasurer the annual tax for 1888 and 1889, payable under chapter 13 of the Public Statutes.

Since January, 1890, the company has run wires across various streets in Roxbury, without the consent of the mayor and aldermen, supporting the wires by poles set on private grounds, and has been and is now supplying electric light through said wires to customers in that part of Boston.

The Attorney-General notified the Board that he came to the

conclusion that the public welfare does not require his intervention, and he declines to commence or allow an action in his name.

ACCIDENTS.

The statute in relation to accidents caused by gas or electricity, section 2, chapter 350, Acts of 1888, is as follows:—

SECT. 2. All companies and individuals engaged in the business of manufacturing and selling gas or electricity for light or fuel shall make a written report within twenty-four hours to the board of gas commissioners of every accident caused by the gas or electricity manufactured or supplied by them, whereby an employee or any other person shall suffer bodily injury or loss of life, or be rendered insensible, stating the time, place and circumstances of the accident, and such other facts in relation thereto as the board may require; and the board shall present in its annual report an abstract of all such cases. The board shall personally investigate all cases which it may deem to require investigation.

During the year 1890 there have been five persons injured, three of them fatally, by electricity from electric light plants; and twenty-three persons have been injured by illuminating gas, eight of them fatally. Of the latter number two committed suicide by inhaling gas; and another, it is suspected, was intentionally subjected to it. The following is an abstract of the cases:—

Accidents from Electricity.

Walter Burke, an employee of the Boston Electric Light Company, was burned by the electric current August 13, while trimming a lamp at the corner of Harrison Avenue and Northampton Street. The company reports that at the time it was sending no current from its station on the circuit supplying the lamp, but that the current doing the damage came from the wires of the West End Street Railway through a broken telephone wire, which crossed them at the junction of Warren Street and Chestnut Avenue, and communicated with the lighting circuit. The company further reports that all its lamps are supplied with absolute cut-outs, and that the accident occurred because the trimmer, in violation of its orders, omitted first to cut out the lamp.

Edmund Tryon, aged eighteen, and George Barnard, aged twenty-eight, were reported killed by the electric current from the

street-lighting circuit of the Winchendon Electric Light and Power Company, at Winchendon, September 26. The facts gathered by inquiry and from reports of the company were as follows: A guy wire, No. 6 in size, which had been used to stay a corner pole, and which was still attached to the top of the pole, lay coiled up on the ground near the pole. This wire evidently came in contact with the main wire leading to the lamp on the pole, as sparks were seen emitting from the wire as it lay in the grass shortly before the accident. The men were found dead about quarter past eight in the evening, lying on the ground, each having hold of this guy wire with his right hand. The medical examiner who saw the bodies within an hour after the accident reports that their right hands were considerably burned from grasping the wire, and that there were no other marks of injury to be seen. The agent of the company reported that it was an alternating current of one thousand volts and three and one-half amperes, and that on the circuit were forty lamps, twenty-five volts and twenty-five candle-power each.

The Waltham Gas Light Company, which also supplies electric light, reported that October 1 one of its electrical engineers, James Skerry, while making the usual change of plug on the switch board with his right hand, in some manner got his left hand in contact with another wire, thereby taking the current through his body. He was thrown violently about, until an assistant, James White, who was present, at an opportune moment, with his open hand, knocked the plug from Skerry's hand. Skerry soon recovered consciousness. His hands were severely burned, and his body much bruised. He was able to be at the station the next day.

Neil McKinnon, about thirty years of age, was killed a few minutes before 5 o'clock P.M., November 10, at the corner of Beacon and Washington streets, in Somerville, by a one thousand volt alternating current from a street-light circuit of the Somerville Electric Light Company. He was standing on the ground, and was about to splice a wire, or "tape" a joint, as it is called; he took hold of the wire at the joint where the wire was entirely bare, gave a gasp, and fell back dead. One of the workmen employed with him, seeing that he had received a shock, knocked the wire

from his hand, and caught him as he fell. The only visible marks made by the current on his person were two small holes, one in his thumb and the other in his forefinger. He had on no rubber gloves. The accident occurred about the time the current was turned on. He had worked for the company about three years.

Accidents from Gas.

The Lowell Gas Light Company reported that, in the afternoon of February 24, a leak of gas at the southerly end of Aiken Street bridge caused Patrick Cain, an employee of the company, to become insensible for a short time. He was taken to St. John's Hospital and thence to his home, where, by 6 o'clock in the evening, he had nearly recovered. He was out the next morning.

Hattie Wood, aged 42, was taken to the City Hospital in a critical condition, March 8, from the effects of inhaling gas at the Park Square Hotel in Boston. She was discovered in an unconscious condition about 7 A.M. It is not known at what hour she retired. The burner, marked three foot, was found open. The room contained five hundred and seventy cubic feet, one window closed, and one door slightly ajar. She fully recovered, and left the hospital March 10.

Ellen Driscoll, aged 22, a domestic at 168 West Canton Street, Boston, was found in her room about 6 o'clock A.M., March 18, unconscious from the effects of inhaling gas. The gas was escaping from the open burner. The light was probably extinguished between 11 and 12 o'clock. She thinks she turned on the gas after turning it off. She was carried to the Boston City Hospital, from which she was discharged well the next day. The room had one door and one window, both shut. The room contained five hundred and fifty-three cubic feet.

The death of Louisa Proctor at Reading, April 14, was caused by inhaling gas in a room containing about one thousand cubic feet. The room had two windows and a door, all tightly closed. The agent of the gas company reported that, as there was evidence the deceased had taken chloroform and both burners were found open, it was without doubt a case of suicide.

The Boston Gas Light Company reports that April 26 James

Shea, aged twenty-eight years, while engaged in tapping a one-inch hole in a producer gas pipe, became unconscious from the effects of the escaping gas. Brandy was given, and in about twenty minutes he went home. He returned and worked an hour the following Monday, since which time he has not been put to work, but has brought suit against the company.

Mrs. Cordelia F. Hall, aged about thirty-five years, wife of President G. Stanley Hall of Clark University, and their daughter Julia F. Hall, aged eight years, were found dead in their bed-chamber, suffocated by illuminating gas, between 7 and 8 o'clock on the morning of May 15, at their home, 94 Woodland Street, Worcester. The chamber was sixteen by eighteen feet, and contained about three thousand cubic feet. It had three windows and one door, all tightly closed. In the room was a gas bracket at either side of the mantel, and suspended from the ceiling was a chandelier of two lights, one a plain burner, the other having an electric lighting attachment. The stop-cocks of the chandeliers were near together. The plain burner was found open. It is not certain whether the other was open, or shut, as successive movements of the ratchet alternately opened and closed it. In turning off the gas, or in an unsuccessful attempt to light it, one or both of the stop-cocks, it is thought, were accidentally left in the condition in which they were found. The gas made in Worcester during the two days previous contained from sixteen to eighteen per cent. water gas. An analysis of a sample of gas, taken May 15 from the premises where the accident occurred, showed 11.19 per cent. of carbonic oxide.

John M. Bowen, aged about twenty-three, was found unconscious and breathing heavily from inhaling gas, in his room, 49 Piedmont Street, in Worcester, a little after 6 in the morning, May 24. He retired at 10.30 the night before. The room contained about seven hundred and sixty-five cubic feet. The room had one window and two doors, all fitting rather loosely. The man was so far restored by fresh air and such aid as those in the house could render, that late in the afternoon he was able to get up and go out of doors. The company reported that the day previous it made a little over twenty-five per cent. of water gas in its total product.

The Boston Gas Light Company reported a slight explosion of gas at No. 880 Washington Street, Boston, May 26. A plumber, name unknown, was connecting a meter with the main. He took out an inch plug, and dropped it. In searching for it, he took a light, which set fire to the escaping gas. The man was burned about the face, but not seriously.

Emil Lerche, in Springfield, September 7, noticing the odor of gas on his premises, went with Charles Prose to search for the leak. Going into a refrigerator in the cellar in which there was a gas burner, a match was lighted, which set fire to the mixture of air and gas, causing an explosion, and burning them quite severely. The burner in the refrigerator was found open, the light having been extinguished, probably by the dropping of water from the ceiling.

John Oates and William Buckley, each about twenty-five years of age, registered at the Hampton House, Boston, a few minutes past 11 o'clock on the night of October 1, and went at once to their room. The next forenoon, at 11 o'clock, the odor of gas being traceable to that room, the door was opened. The room was full of gas, the jet being about two-thirds on. Buckley was dead, and Oates unconscious. The latter was sent to the City Hospital, where, as the superintendent reports, he made steady recovery, and was discharged well October 8. The men appeared healthy, and of good habits. The room in which they slept contained twelve hundred cubic feet. The window, which fitted closely, and the transom over the door, were both shut. There were cracks about the lower part of the door. The gas fixture in the room was new, and in good condition. The burner was marked three foot, but evidently allowed a larger flow of gas, even when only two-thirds open.

The New Bedford Gas Light Company reports that, October 7, George T. Smith, an employee, upon connecting a gas stove on the premises of a consumer and setting the meter, discovered from the motion of the meter hand that the gas leaked at some point. He found in a small room without windows that a fixture had been broken off, from which the gas was escaping. After ventilating the room sufficiently, as he supposed, through the door, and being obliged to use an alcoholic torch in the room, the gas in the top

of the room exploded, and burned him quite severely about the face and neck. He sought medical aid, and for a number of days was confined to his home.

The same company also reports that, October 28, an old employee, Thomas Daily, and a young man, Patrick O'Brien, were made unconscious by inhaling illuminating coal gas while stopping a leak in a joint of a main pipe. The former was only partially asphyxiated. O'Brien soon regained consciousness, assisted by means of artificial respiration. The men were sent home, but returned to work the next morning in apparent usual health.

James Healey White, seven years of age, was fatally suffocated by illuminating gas at Worcester, November 21, in a tenement occupied by Mrs. Hattie F. Tolman, with whom the boy was boarding. About 7.30 o'clock in the morning a visitor called, and, opening the door to the bedroom, she was met by a strong current of gas. She saw the boy and Mrs. Tolman lying on the bed. Other persons were summoned, and it was found that the boy was dead, but that the woman was still alive. She was taken to the City Hospital, where under treatment she soon recovered. The stop-cock, which was found open, was one easily turned. There were circumstances, however, tending to show that the gas had been turned on intentionally by Mrs. Tolman, and she has been bound over to await the action of the grand jury.

Andrew J. Presley, aged twenty-six, and Katie Roach, aged twenty-one, registered as H. French and wife at the Boston Hotel in Boston, about 11 o'clock in the evening of November 26, and went directly to the room assigned them. The next day at 2 P.M., as there was no response to repeated knocks at the door, it was burst open. The stop-cock was found turned on, and the room filled with gas. Both persons were lying on the bed, the man dead and the woman unconscious. Efforts of the physician who was called failing to restore her to consciousness, she was sent to the Boston City Hospital, where she died the following day. The room in which the accident happened contained about six hundred and fifty cubic feet, having one window and one door, both closed, and an opening, with no means of closing it, thirty-four inches long and two and one-half inches high, over the door leading into the hall. The marks on the tip were obscured, but

it appeared to be what is commonly known as a four-foot burner.

Patrick Connolly, aged twenty-five, retired to his room at Hotel Carrolton, Boston, at 10.45 in the evening of December 4. At 8 the next morning gas was noticed coming from his room. As he did not respond to knocks at the door, it was forced open. The room was full of gas from the open burner. The labors of a physician for two hours failed to restore consciousness, and the man was sent to the City Hospital, from which he was discharged two or three days later. The room was nine and a half by seven feet and ten feet high, having a loose window and a crack one-quarter of an inch wide under the door. The burner was marked three foot, and the flow of gas was regulated by a governor. It is thought that the man blew out the gas.

Daniel J. Murphy, aged thirty-five, was found dead at the Falmouth House, Boston, about 8 o'clock A.M., December 23, from illuminating gas intentionally inhaled. It is not known at what hour he retired. The odor of gas was traced to his room. On forcing open the door, it was discovered that the arm of the gas bracket had been removed, and the gas was flowing into the room from the open pipe. The room contained thirteen hundred cubic feet.

George Melville, an actor by profession, aged about thirty-five, was discovered in an unconscious state in his room at Vieth's Hotel, Boston, about 1 o'clock P.M., December 26. At 9.30 in the morning he arose and turned off the gas, which had been left burning a little during the night, and again went to bed. Attention was called to the room by the odor of gas, and the door forced open. Gas was escaping from a three-foot burner, with the stop-cock turned half on. The window was down about an inch at the top. By the labors of a physician, who was speedily called and administered effective remedies, consciousness was restored, and Mr. Melville was able to leave his room that afternoon, but unable to appear on the stage in the evening. He supposes that he must have accidentally hit the stop-cock and turned it again after shutting off the gas. The room was eleven by eight feet, and eight feet high.

The total number of deaths by inhaling illuminating gas in the

United States in 1890, as reported to the Board, from various sources, was 174. In the accounts thus given it appears that 35 of the number were cases of suicide, leaving 139 which are supposed to have been accidental. The accidental deaths, omitting those in this State, occurred in the following cities and towns:—

New York City, 31; Albany, New Brighton and Oneida, N. Y., 1 each; Batavia, N. Y., 2; Philadelphia, 17; Bethlehem, Huntington, Reading and Mauch Chunk, Penn., 1 each; San Francisco, 15; Oakland and Gilroy, Cal., 1 each; Washington, D. C., 2; Chicago, 31; Aurora, Ill., 1; Providence and Newport, R. I., 1 each; Jersey City and Hoboken, N. J., 2 each; Camden, N. J., 1; Baltimore, 4; Lutherville, Md., 1; New Haven, 3; Middletown, Conn., 1; Omaha, 3; Grand Isle, Neb., 1; Davenport and Sioux City, Ia., 1 each; Louisville, 1; Helena, Mon., 1; Madison, Wis., 1.

The fatal accidents in each month were as follows:—

January 12, February 11, March 9, April 10, May 13, June 6, July 4, August 8, September 12, October 15, November 25, December 14.

Of these deaths, 1 happened where oil gas is made, 6 where only coal gas is used, 49 in places where there is only water gas, and 83 where there are both coal and water gas works, the two gases being usually mixed.

The following table shows the corporate name, the localities supplied, the capital and the par value of the shares of the companies in active operation on the thirtieth day of June last:—

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Adams Gas Light Co.,	Adams,	\$17,300	\$25
Amesbury & Salisbury Gas Co.,	Amesbury,	60,000	100
Amherst Gas Co.,	Amherst,	25,000	100
Arlington Gas Light Co.,	Arlington,	70,000	100
	Belmont,	—	—
	Winchester,	—	—
Attleborough Gas Light Co.,	Attleborough,	46,400	100
Bay State Gas Co.,*	—	400,000	100
Beverly Gas Light Co.,	Beverly,	60,000	100
Boston Gas Light Co.,	Boston (city proper),	2,500,000	500
Brockton Gas Light Co.,	Brockton,	100,000	100
Brookline Gas Light Co.,	Brookline,	450,000	100
	Boston (Brighton District),	—	—
Cambridge Gas Light Co.,	Cambridge,	700,000	100
	Somerville (in part),	—	—
Charlestown Gas Co.,	Charlestown,	500,000	50
	Somerville (in part),	—	—
	Medford (in part),	—	—
Chelsea Gas Light Co.,	Chelsea,	300,000	100
Chicopee Gas Works,	Chicopee Centre,	30,000	—
Citizens' Gas Light Co. of Quincy,	Quincy,	53,000	100
Citizens' Gas Light Co. of South Reading,	Wakefield,	95,300	100
	Reading,	—	—
	Stoneham,	—	—
Clinton Gas Light Co.,	Clinton,	35,000	500
Cottage City Gas & Electric Co.,	Cottage City,	25,000	100
Danvers Gas Light Co.,	Danvers,	20,000	50
Dedham & Hyde Park Gas & Electric Light Co.,	Dedham,	100,000	50
	Hyde Park,	—	—
Dorchester Gas Light Co.,	Boston (Dorchester District),	400,000	100
	Milton,	—	—
East Boston Gas Co.,	Boston (E. Boston),	220,000	25
Easthampton Gas Co.,	Easthampton,	30,000	100
Fall River Gas Works Co.,	Fall River (in part),	288,000	100
Fitchburg Gas Co.,	Fitchburgh,	100,000	50
Gardner Gas Light Co.,	Gardner,	30,000	100
Gloucester Gas Light Co.,	Gloucester,	62,300	50
Great Barrington Gas Light Co.,	Great Barrington,	5,000	100
Greenfield Gas Light Co.,	Greenfield,	50,000	50
Haverhill Gas Light Co.,	Haverhill,	75,000	50
	Bradford,	—	—
Ipswich Gas Light Co.,	Ipswich,	16,000	100
Jamaica Plain Gas Light Co.,	Boston (Ward 23),	200,000	100
Lawrence Gas Co.,	Lawrence,	500,000	100
	Methuen,	—	—
	North Andover,	—	—

*Sells to other companies only.

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Lee Electric Co.,	Lee,	\$20,000	\$100
Leominster Gas Light Co.,	Leominster,	50,000	100
Lexington Gas Light Co.,	Lexington,	20,000	100
Lowell Gas Light Co.,	Lowell,	300,000	100
	Dracont,	—	—
	Tewksbury,	—	—
Lynn Gas & Electric Co.,	Lynn,	375,000	100
	Swampscott,	—	—
Malden & Melrose Gas Light Co.,	Malden,	220,000	100
	Melrose,	—	—
	Medford (in part),	—	—
	Everett,	—	—
Manufacturers' Gas Light Co.,	Fall River (in part),	50,000	100
Marblehead Gas & Electric Light Co.,	Marblehead,	40,000	100
Marlborough Gas Light Co.,	Marlborough,	50,000	100
Middleborough Gas & Electric Co.,	Middleborough,	30,000	100
Milford Gas Light Co.,	Milford,	72,300	100
	Hopedale,	—	—
Miller's River Gas Light Co.,	Athol,	40,000	100
Nantucket Gas Light Co.,	Nantucket,	30,000	100
Natick Gas Light Co.,	Natick,	20,000	100
New Bedford Gas Light Co.,	New Bedford,	550,000	100
Newburyport Gas & Electric Co.,	Newburyport,	140,000	100
Newton & Watertown Gas Light Co.,	Newton,	200,000	100
	Watertown,	—	—
	Wellesley,	—	—
	Weston,	—	—
North Adams Gas Light Co.,	North Adams,	50,000	100
Northampton Gas Light Co.,	Northampton,	50,000	25
North Attleborough Gas Light Co.,	North Attleborough,	68,100	100
	Attleborough Falls,	—	—
	Wrentham,	—	—
Norwood Gas Light Co.,	Norwood,	12,000	100
Pittsfield Coal Gas Co.,	Pittsfield,	62,500	100
Plymouth Gas Light Co.,	Plymouth,	40,000	100
Roxbury Gas Light Co.,	Boston (Roxbury District),	600,000	100
Salem Gas Light Co.,	Salem,	300,000	100
	Peabody,	—	—
South Boston Gas Light Co.,	Boston (South Boston),	440,000	100
Southbridge Gas & Electric Co.,	Southbridge,	40,000	100
Spencer Gas Co.,	Spencer,	85,000	100
Springfield Gas Light Co.,	Springfield,	500,000	100
Stoughton Light, Heat and Power Co.,	Stoughton,	40,000	50
Taunton Gas Light Co.,	Taunton,	80,000	50
Waltham Gas Light Co.,	Waltham,	140,000	100
Webster Electric Co.,	Webster,	45,000	100
	Dudley,	—	—
Westfield Gas Light Co.,	Westfield,	54,000	100
Williamstown Gas Co.,	Williamstown,	20,000	100
Woburn Gas Light Co.,	Woburn,	45,100	100
Worcester Gas Light Co.,	Worcester,	500,000	100

The company at Fitchburg furnishes water, that at Gloucester maintains a wharf and supplies water, and that at Springfield furnishes steam for heating. In addition to these, the companies in Amherst, Beverly, Brookline, Charlestown, Chelsea, Clinton, Cottage City, Fitchburg, Lawrence, Lee, Lynn, Middleborough, Athol, Southbridge, New Bedford, Newburyport, Newton, North Adams, Spencer, Stoughton, Waltham, Webster and Westfield, furnish electric light.

The following table shows the names of the owners of gas works not owned by gas companies, the localities supplied, and the estimated value of the plant:—

Chicopee Manufacturing Co.,	Chicopee Falls,	\$15,000 00
Holyoke Water Power Co.,	Holyoke,	147,650 00
Otis Co.,	Ware,	10,000 00

The Holyoke Water Power Company has an electric plant, the value of which is included.

The following companies have bonds and notes outstanding:—

Amherst,	\$18,500 00
Bay State (Boston),	4,512,000 00
Beverly (special stock),	11,800 00
Beverly (notes),	5,886 12
Brockton,	100,000 00
Brookline,	78,000 00
Charlestown,	5,000 00
Chelsea,	65,000 00
Citizens' (Quincy),	19,000 00
Citizens' (Wakefield),	4,500 00
Clinton,	30,500 00
Danvers,	3,000 00
Dedham,	8,500 00
Fitchburg,	68,000 00
Gardner,	20,300 00
Greenfield,	2,000 00
Haverhill,	42,500 00
Ipswich,	9,083 43
Jamaica Plain,	32,500 00
Lawrence,	20,000 00
Lee,	15,000 00
Lexington,	126 13
Lynn,	67,500 00
Marblehead,	3,000 00
Middleborough,	30,000 00

Miller's River (Athol),	\$13,950 53
Natick,	8,500 00
New Bedford,	141,300 00
Newburyport,	16,000 00
Newton,	150,586 66
North Adams,	18,000 00
North Attleborough,	47,670 00
South Boston,	68,000 00
Southbridge,	15,000 00
Spencer,	85,000 00
Springfield,	60,000 00
Stoughton,	40,000 00
Waltham,	20,000 00
Webster,	32,444 34
Westfield,	23,500 00
Williamstown,	11,503 60
Worcester,	20,000 00

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value of the stock held within the Commonwealth:—

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at Par of Stock held in Massachusetts.
Adams,	8	8	\$17,300
Amesbury,	14	5	27,700
Amherst,	37	37	25,000
Arlington,	55	41	42,900
Attleborough,	22	20	45,900
Bay State (Boston),	8	6	600
Beverly,	35	35	60,000
Boston,	6	4	2,000
Brockton,	44	42	62,800
Brookline,	141	123	383,400
Cambridge,	389	347	628,900
Charlestown,	238	228	471,900
Chelsea,	129	123	289,700
Chicopee,	2	2	30,000
Citizens' (Quincy),	5	3	42,400
Citizens' (Wakefield),	71	58	70,200
Clinton,	19	19	35,000
Cottage City,	10	10	25,000
Danvers,	23	22	11,950
Dedham,	40	33	66,650
Dorchester,	19	17	399,800
East Boston,	128	108	195,375
Easthampton,	39	33	26,300
Fall River,	10	7	13,200
Fitchburg,	36	33	91,300

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at Par of Stock held in Massachusetts.
Gardner,	4	3	\$24,000
Gloucester,	58	55	61,350
Great Barrington,	5	5	5,000
Greenfield,	37	27	43,700
Haverhill,	57	52	64,200
Ipswich,	28	28	16,000
Jamaica Plain,	134	128	191,100
Lawrence,	206	187	454,000
Lee,	11	11	20,000
Leominster,	62	56	47,900
Lexington,	21	20	19,900
Lowell,	257	217	448,300
Lynn,	167	158	366,200
Malden,	145	124	188,200
Manufacturers' (Fall River),	7	7	50,000
Marblehead,	29	23	32,500
Marlborough,	12	12	50,000
Middleborough,	6	5	24,000
Milford,	52	48	72,300
Miller's River (Athol),	14	11	28,100
Nantucket,	54	48	34,500
Natick,	37	37	20,000
New Bedford,	352	325	496,000
Newburyport,	95	80	130,500
Newton,	170	164	194,200
North Adams,	43	29	43,800
Northampton,	39	29	31,275
North Attleborough,	36	33	67,400
Norwood,	4	3	10,000
Pittsfield,	52	39	54,100
Plymouth,	30	26	37,900
Roxbury,	8	4	400
Salem,	246	226	280,100
South Boston,	29	25	43,800
Southbridge,	50	48	38,500
Spencer,	15	15	85,000
Springfield,	121	111	472,200
Stoughton,	17	17	40,000
Taunton,	102	98	76,100
Waltham,	106	99	129,600
Webster,	18	18	45,000
Westfield,	21	18	47,700
Williamstown,	3	3	20,000
Woburn,	48	46	43,400
Worcester,	189	179	465,400

The following statistics exhibit the aggregate receipts and expenses of all the companies in the State, compiled from the items relating to the manufacture and sale of gas in the last two returns made to the Board: —

	YEAR ENDING JUNE 30.	
	1889.	1890.
RECEIPTS: —		
For gas sold by meter,	\$4,027,049 67	\$4,432,899 30
For gas supplied to public lamps,	352,934 84	327,438 05
From sales of coke,	350,451 47	344,897 46
sales of tar,	92,945 78	117,603 71
sales of ammoniacal liquor,	29,777 98	29,636 68
rent of meters,	1,544 18	1,265 28
rent of gas stoves and engines,	2,325 47	1,910 84
rent of gas lamps,	2,239 37	2,076 70
public lamps other than gas lamps,	9,864 29	12,788 53
other sources,	209 06	474 49
Total,	\$4,869,342 11	\$5,270,991 04
EXPENSES: —		
1. Coals,	\$1,289,489 57	\$1,299,030 83
2. Enrichers,	125,055 99	140,017 84
3. Purifying materials,	42,071 39	30,734 13
4. Water,	22,259 42	23,701 50
5. Wages at works,	629,837 46	633,707 66
6. Repairs and maintenance of works (including renewal of retorts),	268,904 45	240,580 22
7. Apparatus and machinery,	31,087 38	52,130 15
8. Wages of meter takers, clerical labor in distribution, and salary or commission of collectors,	83,421 68	98,350 74
9. Repairs, renewals, and maintenance of mains and service pipes,	137,860 60	130,431 95
10. Repairs and renewals of meters,	50,386 15	52,986 83
11. Lighting and repairing (gas lamps only),	13,686 35	10,823 59
12. Lighting and repairing, and materials used for other lamps,	8,497 28	12,319 15
13. Directors' allowances,	4,108 83	10,593 28
14. Salaries of officers,	109,540 96	143,902 06
15. General salaries,	99,366 76	105,116 22
16. Rent of offices,	10,867 19	10,961 61
17. General office expenses,	32,340 14	41,713 20
18. Taxes,	266,810 18	268,949 68
19. Fire insurance,	11,190 44	9,419 61
20. Law expenses,	16,863 57	27,879 51
21. Claims,	601 47	10,390 77
22. Bad debts,	19,975 37	17,002 37
23. Incidental expenses,	40,115 35	39,068 44
24. Gas bought,	-	242,561 64
Total,	\$3,814,337 98	\$3,662,372 98

	FOR YEAR ENDING JUNE 30.	
	1889.	1890.
Leaving an apparent net profit on their gas business of	\$1,555,004 13	\$1,608,618 06
They have also received for interest,	26,534 00	16,085 00
They have also received for rents, etc.,	54,087 83	151,063 43
They have also received from electric lighting,	54,318 62	110,871 40
Making a total,	\$1,689,944 58	\$1,886,637 89
From these receipts were paid interest on bonds and loans,	\$46,350 60	\$144,128 98
Dividends,	1,021,847 00	1,017,785 00
Other items,	18,186 52	107,243 67
	\$1,086,384 12	\$1,269,157 65
Leaving a surplus for the year of	\$603,560 46	\$617,480 24

Seven of the companies appear not to have earned expenses, and thirteen others have not earned sufficient to warrant the declaration of any dividend.

The receipts for gas sold by meter show an apparent increase of about \$415,000; but the sales made by various Boston companies to one another, and thus counted twice as sold, reduce this amount to about \$174,000, still showing a substantial increase in the use of gas. Receipts from public lamps continue to fall off, this year showing a decrease of about \$25,000, undoubtedly due to the increased use of electricity for street lighting purposes.

In the appendix will be found, under date of June 30, 1890, the separate balance sheets of the companies, as taken from the annual returns, with corrections as made by the Board after examination and correspondence with the officers of the several companies.

Aggregates from these balance sheets and those in the returns of 1889 show the following facts: —

	FOR YEAR ENDING JUNE 30.	
	1889.	1890.
ASSETS: —		
Real estate, machinery, street mains and meters,	\$17,943,671 20	\$22,529,075 72
Cash on hand,	624,277 27	557,037 67
Due for gas,	467,951 27	491,658 38
Other accounts due,	102,735 70	112,365 77
Materials, etc.,	577,530 08	535,548 04
Notes receivable,	168,638 66	224,594 53
Investments,	321,334 10	475,559 16
Electric assets,	724,527 79	1,650,427 31
	\$20,990,666 07	\$26,576,266 58
• LIABILITIES: —		
Capital stock,	\$12,705,000 00	\$13,158,300 00
Bonds,	346,100 00	449,970 00
Notes payable,	5,156,181 82	5,541,732 93
Unpaid bills,	77,753 08	141,121 55
Unpaid dividends,	31,970 50	20,353 50
Deposits,	26,145 01	32,752 41
Interest due and unpaid,	3,219 93	3,945 80
Other items,	29,172 30	42,784 99
	\$18,375,542 64	\$19,390,961 18
Reserved and depreciation funds,	545,293 67	618,289 68
	\$18,920,836 31	\$20,009,250 86
Surplus,	2,009,829 76	6,567,015 72
	\$20,930,666 07	\$26,576,266 58

Of these companies —

Sixty ¹ show an aggregate surplus of	\$2,161,375 50	\$6,684,922 97
Seven ² show an aggregate deficit of	151,545 74	117,907 25
Leaving total net surplus, as shown above,	\$2,009,829 76	\$6,567,015 72
Which, added to reserves carried as liabilities,	545,293 67	618,289 68
Would show an actual surplus of	\$2,555,123 43	\$7,185,305 40
Equivalent to per cent. on capital of about,	20	53

¹ 57 in 1889. ² 9 in 1889.

The large increase in the surplus, amounting to \$4,630,181.97, is not due to any sudden increase in the business of the companies, but to the fact that the Boston company has added to its construction accounts the sum of \$4,064,641.08, which had been previously charged to expense accounts or written off from construction accounts, and that the Roxbury company added \$96,892.70, and the Charlestown company \$17,974.11 in the same way. These amounts account for 90 per cent. of the apparent increase.

The following table shows the valuation of the property of each company, as assessed by the local assessors : —

NAME OF COMPANY.	Assessed Value.	NAME OF COMPANY.	Assessed Value.
Adams,	\$13,900	Lowell,	\$997,165
Amesbury,	18,700	Lynn,	199,400
Amherst,	8,950	Malden,	133,700
Arlington,	35,150	Manufacturers' (Fall	
Attleborough,	26,200	River),	58,900
Bay State (Boston),	526,300	Marblehead,	13,800
Beverly,	23,625	Marlborough,	14,000
Boston,	4,351,000	Middleborough,	17,250
Brockton,	76,800	Milford,	76,400
Brookline,	412,900	Miller's River (Athol),	15,000
Cambridge,	704,100	Nantucket,	6,000
Charlestown,	632,500	Natick,	12,200
Chelsea,	283,900	New Bedford,	438,200
Chicopee,	32,000	Newburyport,	92,100
Chicopee Falls,	10,000	Newton,	349,600
Citizens' (Quincy),	20,300	North Adams,	16,000
Citizens' (Wakefield),	22,000	Northampton,	51,800
Clinton,	31,800	North Attleborough,	57,300
Cottage City,	10,400	Norwood,	11,000
Danvers,	4,000	Pittsfield,	64,500
Dedham,	34,775	Plymouth,	22,350
Dorchester,	298,200	Roxbury,	633,500
East Boston,	181,400	Salem,	303,000
Easthampton,	29,500	South Boston,	386,300
Fall River,	247,400	Southbridge,	1
Fitchburg,	101,325	Spencer,	22,400
Gardner,	12,000	Springfield,	548,770
Gloucester,	63,000	Stoughton,	8,000
Great Barrington,	1	Taunton,	64,400
Greenfield,	29,000	Waltham,	181,700
Haverhill,	151,700	Ware,	9,100
Holyoke,	122,000	Webster,	31,300
Ipswich,	5,400	Westfield,	52,500
Jamaica Plain,	193,300	Williamstown,	3,750
Lawrence,	450,000	Woburn,	45,100
Lee,	10,600	Worcester,	551,009
Leominster,	20,000		
Lexington,	3,278	Total,	\$14,615,188

¹ Not returned.

Included in the above are certain companies who have electric light plants, and the following shows the assessed value of such wherever separately returned : —

Amherst,	\$2,000
Beverly,	6,400
Brookline,	56,000
Clinton,	14,800
Fitchburg,	40,500
Holyoke,	22,000
Lawrence,	49,950
Lee,	8,000
Lynn,	80,400
New Bedford,	133,200
Newburyport,	45,000
Newton,	82,100
Webster,	21,500
Westfield,	16,500
	<hr/>
	\$578,350

The value of the gas plants, as assessed by the local assessors, is then in round numbers \$14,000,000, as there are electric plants at Chelsea, Cottage City, Middleborough, Athol, Spencer and Stoughton, which are not given in the above table.

The following table shows the amount paid by each company for taxes, and the amount for each thousand feet of gas sold:—

NAME OF COMPANY.	Amount of Taxes Paid.	Amount per Thousand sold.
Adams,	\$440 64	\$0 0842
Amesbury,	502 47	1178
Amherst,	140 26	1680
Arlington,	1,009 28	1683
Attleborough,	450 04	0700
Bay State (Boston),	7,929 35	0569
Beverly,	463 95	0731
Boston,	77,304 14	0585
Brockton,	710 00	0685
Brookline,	4,786 35	0885
Cambridge,	18,658 96	1573
Charlestown,	9,953 80	1299
Chelsea,	4,790 76	1640
Chicopee,	537 68	0644
Citizens' (Quincy),	331 25	0551
Citizens' (Wakefield),	452 30	0866
Clinton,	437 44	0579
Cottage City,	120 59	0710
Danvers,	82 72	0496
Dedham,	857 61	1431
Dorchester,	6,290 29	1022
East Boston,	7,496 12	2042
Easthampton,	495 04	1346
Fall River,	6,700 63	1412
Fitchburg,	1,286 11	0819
Gardner,	267 40	2782
Gloucester,	1,467 80	1133
Great Barrington,	17 92	0488
Greenfield,	566 56	1908
Haverhill,	2,193 22	0407
Holyoke,	1,906 03	0405
Ipswich,	83 31	0573
Jamaica Plain,	4,542 16	1309
Lawrence,	9,299 88	1344
Lee,	7 60	1401
Leominster,	510 09	3455
Lexington,	128 81	1320
Lowell,	17,969 65	0800
Lynn,	4,593 12	0755
Malden,	2,969 10	0970
Manufacturers' (Fall River),	1,093 06	0815
Marblehead,	505 93	1598
Marlborough,	323 29	0674
Middleborough,	180 85	1875
Milford,	1,237 75	1257
Miller's River (Athol),	154 81	0575
Nantucket,	133 67	0701
Natick,	417 77	1307
New Bedford,	3,639 28	0844

NAME OF COMPANY.	Amount of Taxes Paid.	Amount per Thousand sold.
Newburyport,	\$1,238 64	\$0 1410
Newton,	4,217 15	0899
North Adams,	716 47	0383
Northampton,	838 62	0807
North Attleborough,	1,633 91	1271
Norwood,	188 61	1353
Pittsfield,	1,606 17	1147
Plymouth,	414 85	1044
Roxbury,	13,217 05	0780
Salem,	6,096 50	1688
South Boston,	6,553 65	0995
Southbridge,	209 25	1576
Spencer,	1,042 50	1062
Springfield,	7,723 51	0958
Stoughton,	61 00	2101
Taunton,	1,786 13	0481
Waltham,	2,294 98	0860
Ware,	183 16	0409
Webster,	142 13	1001
Westfield,	615 29	1033
Williamstown,	176 64	1.3341
Woburn,	988 30	1242
Worcester,	11,543 41	0967
	\$269,924 76	

The total sum paid by the companies for taxes, including State inspection, after apportioning to electric account that part of the gas companies' taxes belonging to their electrical departments, was \$269,924.76, an average of 8.2 cents per thousand feet sold; being an increase over the previous year in the total amount of \$614.60, and a decrease of 1.48 cents per thousand feet sold.

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table : —

NAME OF COMPANY.	Rate per Cent.	Amount of Dividends.	Amount per Thousand Sold.
Adams,	20	¹ \$3,460	\$0 6610
Amesbury,	2	1,200	2813
Amherst,	—	² —	—
Arlington,	6	4,200	1171
Attleborough,	6	2,784	4332
Bay State (Boston),	2	10,000	0718
Beverly, } Special Stock,	6	708	—
} Ordinary Stock,	6	3,000	4725
Boston,	10	250,000	1891
Brockton,	7	6,370	4544
Brookline,	6 $\frac{1}{2}$	29,250	5409
Cambridge,	10	70,000	5901
Charlestown,	10	50,000	6526
Chelsea,	6	18,000	6022
Chicopee,	12	3,600	4312
Citizens' (Quincy),	6	1,980	3298
Citizens' (Wakefield),	2	1,906	3649
Clinton,	5	1,750	2369
Cottage City,	—	² —	—
Danvers,	—	² —	—
Dedham,	—	² —	—
Dorchester,	6	24,000	3900
East Boston,	5	11,000	2997
East Hampton,	8	2,400	6527
Fall River,	5	14,400	3034
Fitchburg,	10	8,000	5096
Gardner,	—	² —	—
Gloucester,	³ 8	4,984	3846
Great Barrington,	—	² —	—
Greenfield,	2	1,080	3637
Haverhill,	10	7,500	1392
Ipswich,	—	² —	—
Jamaica Plain,	11	22,000	6342
Lawrence,	8	39,000	5637
Lee,	—	² —	—
Leominster,	—	² —	—
Lexington,	—	² —	—
Lowell,	12	60,000	2673

¹ In addition to this dividend, a rebate is allowed to mills owning stock of 84 cents a thousand on gas used by them.

² No dividend declared.

³ An additional dividend of four per cent. was declared from the earning of wharf property.

NAME OF COMPANY.	Rate per Cent.	Amount of Dividends.	Amount per Thousand Sold.
Lynn,	7	\$26,250	\$0 4315
Malden,	9	19,800	6473
Manufacturers (Fall River),	10	5,000	3730
Marblehead,	—	1 —	—
Marlborough,	—	1 —	—
Middleborough,	—	1 —	—
Milford,	10	7,615	7736
Miller's River (Athol),	—	1 —	—
Nantucket,	—	1 —	—
Natick,	8	1,600	5014
New Bedford,	8	30,000	6958
Newburyport,	6	6,600	7511
Newton,	8	16,000	3411
North Adams,	8	4,000	2140
Northampton,	8	4,000	3847
North Attleborough,	6	4,086	3178
Norwood,	—	1 —	—
Pittsfield,	12	7,500	5367
Plymouth,	6	2,400	6038
Roxbury,	12 $\frac{1}{2}$	75,000	4427
Salem,	6 $\frac{1}{2}$	19,500	5399
South Boston,	8	35,200	5343
Southbridge,	3	1,200	9035
Spencer,	—	1 —	—
Springfield,	8	40,000	4963
Stoughton,	—	1 —	—
Taunton,	10	8,000	2154
Waltham,	6	8,400	3148
Webster,	—	1 —	—
Westfield,	8	4,320	7251
Williamstown,	—	1 —	—
Woburn,	8	3,608	4556
Worcester,	8	40,000	3361
	—	\$1,022,651	—

¹ No dividend declared.

PRICE OF GAS.

The following companies have reduced the price of gas during the year ending June 30, 1890 : —

Beverly,	Lee,
Cambridge,	Manufacturers' (Fall River),
Clinton,	Natick,
Dedham,	North Adams,
Fall River,	Pittsfield,
Greenfield,	Southbridge,
Haverhill,	Stoughton,
Holyoke,	Ware,
Lawrence,	Westfield

Of these companies, four made reductions in 1889 and six in 1888, one made a reduction in both years.

The following pages show the price charged by the several companies June 30, 1890; the average candle-power as shown by the tests made by the State inspector of gas; and the average price per thousand feet sold by meter received in the two years ending June 30, 1890.

The gas made is coal gas, except where otherwise noted.

NAME OF COMPANY.	Average Candle- power.	Gross Price.	R E M A R K S.	Average Price, 1888-'89.	Average Price, 1889-'90.
Adams,	19.53	\$3 00	Twenty per cent. discount, if paid within 5 days from date of bill,	\$2 39	\$2 40
Amesbury,	23.55	2 50	Houses and stores, \$2.25 and \$2; carriage shops, \$1.75; cotton mills, \$1.50, less 15 cents; gas engines, \$1. Water gas.	1 91	1 73
Amherst,	44.90	6 00	If bill amounts to \$5, discount 5 per cent.; to \$10, 10 per cent.; to \$20, 15 per cent.; to \$50, 20 per cent.; to \$75, 25 per cent. Oil gas, with 5 to 8 per cent. air.	5 41	5 16
Arlington,	17.07	2 75	Discount of 40 cents per M to consumers of 10,000 feet and upward; 20 cents per M to consumers of over 1,000 feet and less than 10,000 feet burned during the quarter. \$2 per M net to gas stoves.	2 75	2 75
Attleborough,	16.53	2 00	Discounts: 10 cents per M allowed to monthly consumers at the end of the year, if their bills have exceeded \$1,000, and have been paid promptly.	2 00	2 00
Beverly,	17.10	2 60	Discounts: On 1,000 feet and under, 10 cents per M; on 1,000 to 5,000 feet, 15 cents per M; 5,000 feet and over, 25 cents per M; if paid within 10 days.	2 42	2 31
Boston,	19.10	1 30	To some large consumers, \$2. Discount 20 cents per M, if paid within 25 days of date of bill. Large consumers, \$1.50 net per M.	1 27	1 23
Brockton,	17.72	2 25	Discount 25 cents per M, if paid in 15 days. Coal gas and water gas,	2 03	2 09
Brookline,	17.65	2 20	Ten cents per M discount to consumers burning over \$500 worth per year.	2 18	1 94
Cambridge,	17.40	1 80	Discount 50 cents per M on bills paid within 10 days. Special discounts to manu- facturing corporations.	1 71	1 67
Charlestown,	17.61	2 00	Large consumers, \$3. Oil gas, with 30 per cent. air,	1 72	1 72
Chelsea,	18.23	2 00	Discounts: 33½ per cent. to business houses; 5 per cent. to 15 per cent. to dwellings, if paid by the 10th of the month.	1 97	1 96
Chicopee,	16.80	2 75	To town of Wakefield discount of 25 cents per M on gas used for town purposes, but no discount.	1 82	1 80
Chicopee Falls,	29.10	4 00	Discount 10 per cent. on bills paid within 10 days. Large consumers \$1.50 to \$2, but no discount.	3 57	3 33
Citizens' (Quincy),	16.80	3 00	Discount 20 cents per M, if paid in 5 days,	2 44	2 42
Citizens' (Wakefield),	16.53	2 50	Discount 10 per cent., if paid on or before the 15th of the month. Discount to gas stoves, \$1.	2 46	2 48
Clinton,	17.30	2 50	Discount 20 cents per M, for payment before the 16th of the month,	2 19	2 12
Cottage City,	16.35	2 20	Discount 50 cents per M, for payment within 10 days,	2 87	1 95
Danvers,	16.45	3 00	Discount 63 per cent. making \$2.80 net. To the town, and consumers using 50,000 feet a year, the bills are made at \$2.50, with a discount at 4 per cent., making net price \$2.40.	2 87	2 61
Dedham,	16.77	2 50		2 47	2 28
Dorchester,	18.66	2 50		2 15	2 03
East Boston,	16.95	1 75		1 76	1 77
Easthampton,	17.00	3 00		2 51	2 52

NAME OF COMPANY.	Average Candle- power.	Gross Price.	R E M A R K S.	Average Price, 1888-89.	Average Price, 1889-90.
Fall River,	20.39	\$2 00	Discounts: 35 cents per M, if paid by the 15th of the month. Some large consumers 60 cents discount, and on bills of less than 500 feet per month discount is 10 cents per M.	\$1 53	\$1 57
Fitchburg, Gardner,	17.77 51.90	2 00 6 00	Some special contracts, Discounts vary according to amount used from 10 to 35 per cent., if paid by the 10th of the month. Pure oil gas.	1 81 4 50	1 92 4 50
Gloucester, Great Barrington,	18.00 21.00	2 00 3 50	Discount 10 per cent., if paid on or before 15th of the month,	1 80 3 50	1 81 3 50
Greenfield,	18.37	2 50	Oil gas, with 10 per cent. air, On bills of \$2.50 per month, for dwellings 5 per cent. discount, if paid in 5 days; on bills of \$2.50 for stores, 10 per cent.	2 37	2 35
Haverhill, Holyoke,	18.36 17.94	1 50 2 00	Discount 10 cents per M, if paid on or before the 10th. Day consumption, \$1 25, . Discount 35 per cent. to consumers of 350,000 feet, 25 per cent. to manufacturers and mills; 16½ per cent. to churches and large stores; 12½ per cent. to merchants and dwelling houses; \$1.25 net to gas engines.	1 49 1 61	1 40 1 53
Ipswich, Jamaica Plain,	26.10 17.93	3 50 2 50	To some consumers, \$2.50. Oil gas, with 25 per cent. of air, Fifty cents per M discount on bills paid within 15 days. City buildings 5 per cent. off net price.	2 90 2 00	3 01 2 00
Lawrence,	18.75	1 70	Twenty cents per M discount, if paid before the 15th of the month. Between 250,000 and 800,000 feet per year, \$1.50, less 10 cents; over 800,000, \$1.30 net.	1 44	1 41
Lee,	70.50	11 00	Discount 50 per cent. Pure oil gas,	7 50	5 50
Leominster,	29.15	4 00	Oil gas, with 50 per cent. air,	4 05	4 00
Lexington,	28.45	6 00	Discount 10 per cent. for prompt payment. A few large consumers, special rates.	5 22	5 40
Lowell,	17.57	1 30	Oil gas, with 33¼ per cent. air.	1 10	1 10
Lynn,	18.53	2 00	Discount 20 cents per M, if paid within 5 days, Discount 20 cents per M, for payment within 10 days. Gas engines, 50 per cent. discount. Coal gas and water gas.	1 77	1 76
Malden,	16 68	2 20	Discount 20 cents per M, if bills are paid by 20th of month. Factories and large consumers, 40 cents, 45 cents, 60 cents and 70 cents per M, discount.	1 95	1 95
Manufacturers' (Fall River),	18.22	2 00	Discount on less than 500 feet per month, 10 cents per M; on more than 500 feet and less than 1,000 feet, 25 cents per M; consumers of more than 1,000 feet, 35 cents per M. Some large consumers 60 cents per M.	1 54	1 52
Marblehead,	16.93	3 00	Discount 10 per cent., if paid before the 16th of the month. Manufacturers, 50 cents per M discount; town, 60 cents per M; gas engines, stoves and heating machines in factories, \$1 per M discount.	2 72	2 57
Marlborough,	18.25	2 50	Discount 10 per cent. to large consumers,	2 12	2 32
Middleborough,	34.55	5 00	Lowest price to manufacturers, \$4 per M. Pure oil gas,	5 40	5 00
Milford,	17.57	2 00	Five per cent. discount on bills exceeding \$50 per month,	1 97	1 96

Miller's River (Athol), . . .	17.97	3 00	Discount 50 cents per M, if paid within 10 days; 5 per cent. additional to small mills, etc.; 10 per cent. to large mills, etc.	2 31	2 37
Nantucket, . . .	17.60	3 00	Largest consumers, discount of 50 cents per M.	2 88	2 85
Natick, . . .	16.35	2 00	Discount 10 cents per M, if paid on or before the 15th of the month; 20 cents per M to consumers of 10,000 feet in any one quarter.	2 35	2 11
New Bedford, . . .	16.67	2 00	Discount 10 per cent., for payment in 5 days; and 25 per cent. on consumption of 4,000 feet per month.	1 56	1 52
Newburyport, . . .	17.50	2 50	Discount 20 per cent. on bills of 1,000 feet or more per month; 10 per cent. on all less than 1,000 feet per month, for prompt payment.	1 98	2 01
Newton, . . .	17.78	2 25	Consumption of 100,000 feet per year, \$1.30 net; 200,000 feet, \$1.80; 300,000 feet, \$1.75; 400,000 feet, \$1.70; day consumption by special meter, \$1.50; general consumers, 25 cents per M discount for cash in 20 days.	1 96	1 96
North Adams, . . .	17.12	1 85	To some consumers, \$1.60.	1 90	1 73
Northampton, . . .	17.47	2 00	To large consumers, 5 per cent. discount, if paid within 5 days.	1 91	1 90
North Attleborough, . . .	16.85	2 50	Discount 50 cents per M, if paid on or before the 16th of the month.	2 01	2 00
Norwood, . . .	-	3 00	If paid within 15 days, discount of 30 cents per M. Special prices to large consumers and churches.	2 36	2 43
Pittsfield, . . .	19.57	2 50	Discount 10 per cent. on bills of less than 1,000 feet per month; 20 per cent. on bills of 1,000 feet and less than 25,000; 40 per cent. on bills of 25,000 feet or over.	1 96	1 90
Plymouth, . . .	17.33	2 50	Special price to large consumers.	2 16	2 10
Roxbury, . . .	18.68	1 75	Discount of 15 cents per M, if paid on or before the 12th of the month; 5 per cent. additional to consumers whose bills amount to \$500 a year.	1 61	1 61
Salem, . . .	17.66	2 00	Discount 10 per cent., if paid on or before the 15th of the month.	1 80	1 80
South Boston, . . .	17.75	2 00	Discount 10 per cent., if paid on or before the 18th of the month; price to large consumers, \$1.50.	1 77	1 77
Southbridge, . . .	23.00	3 00	Discount 5 per cent. to consumers of 1,000 feet, and 10 per cent. to consumers of 2,000 feet and over. Oil gas with 30 to 40 per cent. of air.	3 00	2 82
Spencer, . . .	19.52	1 25	One dollar and sixty-five cents net for bills averaging \$600 per year; \$1.25 for gas used by city.	1 21	1 25
Springfield, . . .	17.99	1 75	Discount 10 per cent., if paid by the 10th of the month. Pure oil gas, . . .	1 69	1 68
Stoughton, . . .	52.80	5 50	Over 125,000 feet per quarter, \$1.40 per M.	-	5 00
Taunton, . . .	17.37	1 50	Discount 20 per cent., if paid by the 15th of the month.	1 52	1 47
Waltham, . . .	17.28	2 50	Public institutions, \$1.75.	1 74	1 80
Ware, . . .	17.45	2 25	Ten per cent. discount for cash; 5 per cent. additional for consumption of 20,000 feet per year.	2 38	2 31
Webster, . . .	18.15	2 50	Discount 5 per cent., if paid before the 10th of the month, and additional 5 per cent. on bills of \$5 00 per month.	2 30	2 29
Westfield, . . .	17.27	2 50	Twenty cents per M discount, if paid on or before the 15th of the month.	2 26	2 29
Williamstown, . . .	-	6 00	Discount of 30 cents per M, if paid on or before the 15th of the month.	-	5 38
Woburn, . . .	17.83	2 00		1 93	1 78
Worcester, . . .	18.59	1 80		1 50	1 50

The average price to consumers for coal gas, of twenty-four companies making annually more than 30,000,000 feet each, is \$1.3946 per thousand feet. The average price of the remainder of the coal-gas companies is \$2.0152, making an average for all of \$1.4461 per thousand. The average price for oil gas is \$3.8106 per thousand feet.

The average price for coal gas in 1886 was \$1.72 ; in 1887, \$1.66 ; in 1888, \$1.56 ; in 1889, \$1.45 ; and in 1890, \$1.39, — a steady gain for the consumer.

The following table shows the amount of gas made in the year ending June 30, 1890, and in the year ending June 30, 1889 ; the amount sold by meter and to public lamps in both these years ; the amount used at works and offices ; and the amount of gas unaccounted for during the year ending June 30, 1890, and the percentage of unaccounted-for gas in both years : —

Coal Gas.

NAME OF COMPANY.	Gas made Year ending June 30, 1890.	Gas made Year ending June 30, 1889.	Gas sold by Meter Year ending June 30, 1890.	Gas sold by Meter Year ending June 30, 1889.	Gas sold for Public Lamps Year ending June 30, 1890.	Gas sold for Public Lamps Year ending June 30, 1889.	Gas used at Works and Offices Year ending June 30, 1890.	Gas unaccounted for, Year ending June 30, 1890.	Percent- age unac- counted for, 1889-90.	Percent- age unac- counted for, 1888-89.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.		
Adams,	6,800,050	6,420,000	5,156,790	4,908,714	77,812	625,000	20,000	1,545,448	22.73	13.57
Amesbury,	4,983,500	4,604,592	4,094,400	3,662,600	147,000	150,000	57,500	689,600	13.84	16.51
Arlington,	7,536,400	6,996,780	5,996,080	6,478,084	-	-	97,600	1,442,120	19.13	20.18
Attleborough,	7,703,000	6,908,500	6,420,800	5,901,575	-	-	63,800	1,212,400	15.74	13.74
Bay State (Boston),	139,962,000	23,566,000	139,422,970	21,889,000	-	-	518,000	97,330	0.07	5.05
Beverly,	7,266,300	6,435,200	5,985,500	5,195,200	359,595	347,700	161,300	756,905	10.41	12.23
Boston,	21,443,855,281	1,274,875,664	1,274,875,664	1,144,007,383	47,460,264	53,239,670	241,000	121,843,711	8.44	6.75
Brookline,	61,108,100	57,581,800	40,162,700	37,457,300	13,913,204	13,473,132	258,400	3,220,523	18.42	15.13
Brookton,	123,986,500	120,756,800	107,964,033	99,485,496	10,682,574	10,533,406	1,026,200	9,558,693	11.09	10.93
Cambridge,	89,883,000	86,236,000	64,459,586	60,444,250	12,152,408	13,473,132	1,175,000	11,946,006	7.40	7.55
Charlestown,	10,044,900	8,777,700	8,323,600	7,252,600	25,388	22,568	150,000	1,541,912	13.31	13.33
Chicopee,	35,547,000	38,175,000	29,031,179	27,745,507	860,000	8,816,195	356,300	5,290,521	15.85	17.19
Chelsea,	7,133,000	6,728,900	5,499,600	4,285,300	604,000	575,200	341,700	787,700	11.04	16.28
Citizens' (Quincy),	6,405,991	5,985,263	4,747,800	3,921,400	474,247	408,043	106,000	1,077,944	16.59	26.20
Citizens' (Wakefield),	8,839,700	8,592,100	7,519,800	6,480,100	37,788	34,920	258,900	1,021,050	11.55	21.62
Clinton,	2,245,800	-	1,548,300	-	150,000	-	-	547,500	24.38	-
Cottage City,	1,738,100	-	1,666,600	-	-	-	53,900	440,870	20.40	31.13
Danvers,	2,161,400	8,234,130	5,566,000	5,841,300	427,200	592,400	240,800	1,676,900	21.14	18.48
Dedham,	7,932,600	64,159,200	30,018,100	35,554,100	22,411,425	20,652,171	-	406,166	0.75	12.40
Dorchester,	361,919,890	38,726,640	25,807,640	23,406,400	10,900,248	11,236,524	291,800	2,755,799	6.93	9.85
East Boston,	39,737,000	4,407,680	3,077,150	3,636,100	-	125,100	119,700	666,680	14.93	13.30
Easthampton,	4,463,530	53,433,200	44,213,000	43,327,200	3,246,357	3,536,376	-	7,586,043	14.11	12.30
Fall River,	55,031,000	17,520,000	14,999,400	14,643,500	670,000	800,000	526,000	1,324,900	7.56	6.81
Fitchburg,	17,127,000	13,024,000	12,215,100	11,676,800	742,750	802,570	100,000	746,150	5.42	9.65
Gloucester,	13,804,000	-	2,969,200	2,891,500	-	-	69,900	599,100	16.45	22.31
Greenfield,	3,641,800	3,831,100	49,839,500	40,289,500	4,053,050	3,384,200	300,000	3,332,450	5.77	5.00
Haverhill,	57,764,000	48,158,411	46,171,900	41,512,900	437,524	411,100	403,700	4,193,688	8.21	12.30
Holyoke,	51,063,600	34,903,300	22,445,030	19,255,100	12,222,802	11,974,552	500,000	3,358,402	8.71	9.10
Jamaica Plain,	38,546,500	74,251,200	69,185,300	67,096,185	-	-	505,340	6,100,239	8.12	9.72
Lawrence,	75,806,000	-	-	-	-	-	-	-	-	-

¹ Sells only to other companies. ² Includes 101,795,000 feet of gas bought. ³ Includes 50,813,500 feet of gas bought. ⁴ Includes 501,000 feet of gas bought.

⁵ Includes 215,000 feet of gas bought.

Coal Gas — Concluded.

NAME OF COMPANY.	Gas made Year ending June 30, 1890.	Gas made Year ending June 30, 1889.	Gas sold by Meter Year ending June 30, 1890.	Gas sold by Meter Year ending June 30, 1889.	Gas sold for Public Lamps Year ending June 30, 1890.	Gas sold for Public Lamps Year ending June 30, 1889.	Gas used at Works and Offices Year ending June 30, 1890.	Gas unaccounted for, Year ending June 30, 1890.	Percent- age un- accounted for, 1889-90.	Percent- age un- accounted for, 1888-89.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.		
Lowell,	239,143,000	214,101,000	216,303,500	192,423,800	8,195,000	7,416,100	2,293,800	11,827,800	4.94	5.51
Lynn,	71,131,000	64,940,300	60,112,000	52,094,400	716,000	2,427,600	1,300,200	8,984,700	12.63	13.39
Malden,	32,276,800	30,469,500	30,680,200	27,104,500	7,500	549,000	249,700	1,439,400	4.46	8.24
Manufacturers' (Fall River),	14,404,500	13,564,400	12,487,300	11,212,000	917,800	908,000	138,100	891,300	5.98	9.34
Marblehead,	3,785,900	3,785,900	2,651,800	2,087,870	500,000	404,452	145,000	847,700	20.34	13.16
Marlborough,	5,648,410	5,358,540	4,735,400	4,256,500	62,300	67,670	168,000	682,710	11.90	17.30
Millford,	10,886,700	9,242,130	9,455,500	8,092,400	389,900	392,126	65,800	977,500	8.90	7.40
Miller's River (Athol),	3,083,900	2,809,000	2,694,100	2,400,700	—	50,000	210,000	178,300	5.78	9.46
Nantucket,	2,287,140	2,491,370	1,431,400	1,674,290	474,561	482,810	48,200	330,570	14.45	11.80
Natick,	3,558,300	3,087,500	2,687,400	3,150,300	203,400	590,000	101,000	204,100	7.42	4.64
New Bedford,	44,882,900	46,838,800	36,990,100	36,133,000	6,120,324	6,658,000	276,000	1,497,970	3.34	7.81
Newburyport,	11,266,890	11,407,780	8,786,500	9,877,800	—	—	200,000	2,283,300	20.25	11.36
Newton,	52,190,200	49,510,400	41,009,300	38,542,700	5,895,100	5,892,700	526,000	4,760,000	9.12	9.28
North Adams,	22,433,800	20,183,400	16,761,700	14,616,400	1,926,000	2,210,000	480,800	3,220,300	14.35	14.25
Northampton,	11,890,400	11,032,800	10,390,200	10,071,100	—	—	129,200	1,366,443	11.49	7.81
North Attleborough,	13,973,000	12,559,100	12,858,800	11,311,800	—	—	235,000	897,760	6.42	8.71
Norwood,	15,607,000	14,024,000	13,495,650	11,968,600	510,000	913,080	225,000	1,436,350	9.17	12.64
Pittsfield,	4,214,390	4,266,170	3,674,500	3,803,400	—	323,740	87,000	187,000	3.75	1.24
Plymouth,	2185,339,940	170,407,000	137,075,400	123,002,000	31,434,822	30,347,567	15,204,100	6,255,407	8.28	9.38
Roxbury,	42,594,000	45,062,000	35,279,800	37,041,000	838,393	987,310	—	4,005,446	14.65	15.32
South Boston,	70,845,500	68,010,000	53,657,600	49,418,387	11,924,398	12,407,637	180,400	882,900	6.92	9.09
Spencer,	11,045,450	10,186,000	9,815,350	8,903,900	—	—	340,000	3,231,200	7.50	8.76
Springfield,	84,306,400	81,589,000	77,114,800	72,271,000	3,470,000	4,617,000	691,300	3,231,200	3.83	4.02
Taunton,	39,127,000	35,531,000	35,022,800	31,706,000	1,210,700	1,335,300	575,400	1,413,100	3.61	5.15
Taunton,	28,071,300	29,248,300	25,464,000	26,553,300	1,222,600	1,299,800	518,400	847,700	3.02	3.66
Ware,	4,955,540	4,676,110	4,480,500	64,081,000	—	12,666	85,800	418,824	8.51	10.65
Webster,	1,695,300	51,173,450	1,420,300	786,400	—	100,000	25,000	249,300	14.70	22.33
Westfield,	6,530,200	6,834,800	5,824,300	5,627,300	133,333	177,933	35,200	537,307	8.21	14.40
Woburn,	8,640,200	8,607,500	7,917,300	7,695,050	—	—	200,200	651,100	6.14	8.59
Worcester,	126,208,500	112,837,700	115,312,200	101,021,000	3,767,000	3,700,300	—	7,185,100	5.69	7.13

¹ Not returned. ² Includes 79,651,940 feet of gas bought. ³ Includes 21,388,000 feet of gas bought. ⁴ Includes 2,278,500 feet used in the mills of the company.

⁵ Includes 2,233,000 feet used in the mills of the company. ⁶ Figures for seven months only.

Oil Gas.

Amherst,	.	.	.	.	.	835,123	89,326	75,684	-	-	-	-
Chicopee Falls,	.	.	.	.	.	2578,230	1 -	1 -	-	-	-	-
Gardner,	.	.	.	.	.	785,000	-	-	-	-	75,360	10.01
Great Barrington,	.	.	.	.	.	438,600	-	-	-	-	-	-
Ipswich,	.	.	.	.	.	1,328,000	62,000	6,000	-	-	-	-
Lee,	.	.	.	.	.	1,402,000	-	-	-	-	-	-
Lexington,	.	.	.	.	.	54,243	-	-	-	-	-	-
Lexington,	.	.	.	.	.	1,476,175	327,728	328,502	30,000	-	6.80	7.77
Middleborough,	.	.	.	.	.	644,110	200,992	205,000	28,162	-	-	4.77
Middleborough,	.	.	.	.	.	636,670	-	-	-	-	-	14.00
Southbridge,	.	.	.	.	.	664,556	-	-	-	-	-	-
Stoughton,	.	.	.	.	.	1,328,000	-	18,250	-	-	-	-
Stoughton,	.	.	.	.	.	1,202,050	-	-	-	-	-	-
Williamstown,	.	.	.	.	.	290,350	-	-	2,000	-	-	-
Williamstown,	.	.	.	.	.	132,400	-	-	-	-	-	-

¹ Quantity not given. ² Quantity of gas used in the mills of the company not known. ³ Works started during the year.

The following table shows the capacity of the works, the greatest and least daily output, and date of the same for each of the companies :—

NAME OF COMPANY.	Daily Capacity of Works.	Greatest Output.	Date.	Least Output.	Date.
Adams, . . .	50,000	1—	1—	1—	1—
Amesbury, . . .	100,000	33,000	Nov 22,	7,700	June 18
Amherst, . . .	5,000	16,000	Nov. —	1,000	July —
Arlington, . . .	50,000	36,770	Dec. 14,	5,910	July 13
Attleborough, . . .	100,000	41,000	Jan. 8,	14,000	June 3
Bay State (Boston), . .	4,000,000	—	—	—	—
Beverly, . . .	35,000	38,400	Jan. 13,	7,800	July 7
Boston, . . .	6,000,000	6,273,532	Dec. 11,	1,053,458	July 7
Brockton, . . .	100,000	82,225	Dec 24,	14,580	July 14
Brookline, . . .	350,000	254,200	Dec. 24,	83,700	July 21
Cambridge, . . .	1,000,000	640,000	Dec 3,	121,000	July 7
Charlestown, . . .	500,000	383,000	Dec. 24,	118,000	July 14
Chelsea, . . .	250,000	171,500	Dec 24,	53,000	July 1
Chicopee, . . .	80,000	59,000	Dec. 19,	7,800	July 8
Chicopee Falls, . . .	2—	2—	2—	2—	2—
Citizens' (Quincy), . .	70,000	38,000	Dec. 26,	14,700	July 4
Citizens' (Wakefield), .	30,000	35,000	2—	8,000	2—
Clinton, . . .	90,000	60,200	Dec. 19,	7,500	July 8
Cottage City, . . .	60,000	25,000	Aug. 8,	800	Jan. 16
Danvers, . . .	20,000	2—	2—	2—	2—
Dedham, . . .	80,000	45,420	Nov. 25,	9,230	July 13
Dorchester, . . .	300,000	278,226	Dec 24,	94,988	June 18
East Boston, . . .	250,000	174,890	Dec 24,	53,370	July 14
Easthampton, . . .	40,000	35,600	Dec. 14,	3,000	July 7
Fall River, . . .	500,000	353,300	Dec. 9,	52,400	July 7
Fitchburg, . . .	100,000	93,200	Dec. 18,	17,300	June 1
Gardner, . . .	15,000	7,000	Dec 26,	1,000	July 4
Gloucester, . . .	125,000	71,000	Dec 22,	13,000	June 28
Great Barrington, . .	2—	2—	2—	2—	2—
Greenfield, . . .	50,000	17,800	Dec. 24,	3,600	July 7
Haverhill, . . .	320,000	363,000	Dec 18,	59,000	Aug. 18
Holyoke, . . .	500,000	271,801	Jan. 15,	52,482	July 7
Ipswich, . . .	2—	2—	2—	2—	2—
Jamaica Plain, . . .	200,000	164,008	Dec. 25,	53,948	July 8
Lawrence, . . .	1,000,000	422 401	Dec. 3,	67,053	June 29
Lee, . . .	4,000	800	2—	200	2—
Leominster, . . .	30,000	2—	2—	2—	2—
Lexington, . . .	20,000	3—	—	3—	—
Lowell, . . .	1,000,000	1,365,000	Dec. 11,	203,000	July 7
Lynn, . . .	500,000	351,000	Dec. 16,	71,900	June 25
Malden, . . .	200,000	60,000	Dec. 6,	34,800	July 9
Manufacturers' (Fall River), . . .	2—	113,200	Dec. 19,	14,100	June 23
Marblehead, . . .	30,000	19,933	Mar. 14,	4,354	July 12
Marlborough, . . .	100,000	36,590	Dec. 12,	4,200	July 14
Middleborough, . . .	2—	2—	2—	2—	2—
Milford, . . .	80,000	63,400	Dec. 11,	8,160	July 7
Miller's River (Athol), .	25,000	18,970	Dec. 23,	2,600	June 1
Nantucket, . . .	28,000	14,250	Aug. 15,	2,970	Apr. 29

¹ No record kept.² Not returned.³ Has no station meter.

NAME OF COMPANY.	Daily Capacity of Works.	Greatest Output.	Date.	Least Output.	Date.
Natick,	35,000	24,800	Nov. 27,	2,800	May 11
New Bedford,	300,000	214,600	Dec 26,	61,000	July 5
Newburyport,	100,000	63,150	Dec. 3,	14,000	July 21
Newton,	250,000	237,000	Jan 16,	72,000	July 14
North Adams,	130,000	109,600	Dec. 14,	28,100	July 23
Northampton,	75,000	60,726	Dec 13,	11,175	July 7
North Attleborough,	110,000	78,555	Dec. 9,	9,160	July 7
Norwood,	2 _	2 _	2 _	2 _	2 _
Pittsfield,	90,000	70,000	Dec. 24,	20,000	June 15
Plymouth,	20,000	22,760	Dec 30,	5,570	June 22
Roxbury,	500,000	989,066	Dec 30,	198,453	June 17
Salem,	300,000	175,000	Dec. 9,	68,000	Aug. 2
South Boston,	425,000	311,553	Dec. 24,	88,972	July 7
Southbridge,	1 _	1 _	1 _	1 _	1 _
Spencer,	120,000	55,700	Nov. 20,	7,700	May 31
Springfield,	500,000	406,000	Dec. 18,	93,000	July 14
Stoughton,	10,000	3 _	3 _	3 _	3 _
Taunton,	250,000	230,000	Dec. 22,	50,000	June 30
Waltham,	200,000	145,500	Dec. 1,	21,000	July 7
Ware,	70,000	33,503	Dec 19,	4,657	July 23
Webster,	24,000	14,000	Dec. 24,	4,000	June 29
Westfield,	40,000	35,400	Dec. 9,	7,300	Aug. 19
Williamstown,	2,500	2 _	2 _	2 _	2 _
Woburn,	80,000	44,900	Dec. 14,	10,800	July 4
Worcester,	1,050,000	662,100	Dec. 24,	124,700	June 29

¹ No record kept.² Not returned.³ Has no station meter.

The following tables show the total quantity of gas sold during the year ending June 30, 1890; the percentage of increase in sales over the previous year; the capital (including bonds) per thousand feet sold, omitting those companies which have electric light plants; the average price received for all gas sold during the year ending June 30, 1890; and the average price received the year previous:—

Coal-gas Companies.

[Boldface figures show decrease.]

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1888-89 Per Cent.	Capital per M sold, includ- ing bonds.	Average price received per M. sold, 1889-90.	Average price received per M. sold, 1888-89.
	Feet.				
Adams,	5,234,602	5 41	\$3 305	\$2 39	\$2 35
Amesbury,	4,265,900	11.88	14 065	1 74	1 91
Arlington,	5,996,680	9 47	11 673	2 75	2 76
Attleborough,	6,425,800	8 90	7 219	2 00	2 00
Bay State (Boston), ¹	139,242,970	636.13	35.995	1 00	1 00
Beverly,	6,348,095	14 53	—	2 31	2 41
Boston,	1,322,335,928	6 84	1 891	1 23	1 25
Brockton,	14,016,800	6 43	14.268	2 09	2 03
Brookline,	54,075,904	6 17	—	1 94	2 13
Cambridge,	118,646,607	7 84	5.901	1 64	1 68
Charlestown,	76,611,994	3 71	—	1 69	1 68
Chelsea,	29,891,179	5.29	10.036	1 96	1 99
Chicopee,	8,348,988	14 76	3.592	1 80	1 83
Citizens' (Quincy), . .	6,003,600	23.52	11.993	2 34	2 35
Citizens' (Wakefield),	5,222,047	20 61	19.111	2 46	2 44
Clinton,	7,557,588	16 00	—	2 12	2 19
Cottage City,	1,698,300	—	—	1 96	—
Danvers,	1,666,600	43 29	13.800	2 61	2 87
Dedham,	5,994,100	6.83	18 101	2 27	2 45
Dorchester,	61,429,525	9 47	6.501	1 93	2 02
East Boston,	36,703,248	5.95	5 994	1 72	1 71
Easthampton,	3,677,150	2 24	8.158	2 52	2 51
Fall River,	47,459,357	1.27	6.068	1 56	1 57
Fitchburg,	15,669,400	1.65	—	1 90	1 80
Gloucester,	12,957,850	3.83	4 808	1 79	1 80
Greenfield,	2,969,200	2 69	17.513	2 35	2 37
Haverhill,	53,892,550	23 39	2.180	1 38	1 48
Holyoke,	46,549,424	11 02	—	1 58	1 60
Jamaica Plain,	34,687,832	11.07	6.703	1 95	1 94
Lawrence,	69,185,300	3.11	—	1 41	1 44
Lowell,	224,499,400	12.23	2.227	1 10	1 10
Lynn,	60,828,000	9 93	—	1 75	1 77
Malden,	30,587,700	10.61	7.192	1 95	1 96
Manufacturers' (Fall River),	13,405,100	10 05	3.730	1 52	1 54
Marblehead,	3,165,600	0 88	13 583	2 54	2 68
Marlborough,	4,797,700	10.87	10.421	2 32	2 13

¹ Sells only to other companies.

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1888-89 Per Cent.	Capital per M sold, includ- ing bonds.	Average price received per M sold, 1889-90	Average price received per M sold, 1888-89
	Feet.				
Milford,	9,843,400	16.01	\$7.345	\$1 96	\$1 97
Miller's River (Athol),	2,694,100	9 53	—	2 37	2 31
Nantucket,	1,905,961	11 64	18.888	2 66	2 71
Natick,	3,190,800	6 87	8 932	2 10	2 24
New Bedford,	43,110,424	1 22	—	1 48	1 55
Newburyport,	8,786,500	11 05	—	2 01	1 98
Newton,	46,905,000	5 56	—	1 91	1 95
North Adams,	18,687,700	11.10	3.639	1 72	1 82
Northampton,	10,396,200	3 23	4 809	1 90	1 91
North Attleborough,	12,858,600	13 67	9 003	2 00	2 01
Norwood,	1,394,100	29.18	8.608	2 43	2 36
Pittsfield,	14,005,650	8.98	4 462	1 89	1 96
Plymouth,	3,974,900	3.69	10.063	2 10	2 19
Roxbury,	169,410,222	9.69	3 542	1 59	1 59
Salem,	36,118,193	5 02	8 306	1 80	1 80
South Boston,	65,881,998	6.56	7.711	1 72	1 72
Spencer,	9,815,930	10.25	—	1 25	1 21
Springfield,	80,587,900	4 81	6 949	1 66	1 67
Taunton,	37,133,500	15 00	2 154	1 47	1 53
Waltham,	26,687,200	3 49	—	1 84	1 81
Ware,	2,202,000	17.73	—	¹ 2 31	¹ 2 38
Webster,	1,420,300	²	—	2 29	2 32
Westfield,	5,957,633	2 62	—	2 29	2 26
Woburn,	7,917,000	2 90	5 683	1 78	1 94
Worcester,	119,019,200	13 57	4.369	1 50	1 50
	3,281,954,329				

¹ Average from gas sold to the public.² Works in operation last year but seven months.*Oil-gas Companies.*

Amherst,	835,046	8 32	—	\$5 22	\$5 46
Chicopee Falls,	781,935	29.14	—	¹ 3 33	¹ 3 57
Gardner,	961,300	22 46	\$52 325	4 50	4 50
Great Barrington,	367,000	—	13 624	3 50	—
Ipswich,	1,454,000	9.08	17 251	3 01	2 90
Lee,	54,243	—	—	5 50	7 50
Leominster,	1,476,175	23 71	33.871	4 00	4 31
Lexington,	971,838	15.46	20.686	4 47	4 93
Middleborough,	964,558	—	—	5 00	5 40
Southbridge,	1,328,090	8 83	—	2 82	3 00
Stoughton,	290,350	—	—	5 50	—
Williamstown,	132,400	—	—	5 66	—
	9,616,935				

¹ Average price gas sold to the public.

The following tables show the capital (including bonds); the gas sold; the gas unaccounted for, and the number of consumers per mile of main; also the gas sold per consumer and per meter light. Where capital is employed for both gas and electric light, the amount per mile of main is omitted.

Coal-gas Companies.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas	Gas
	Capital.	Gas sold.	Gas un- accounted for.	Number of Consumers.	sold per Meter Consumer.	sold per Meter Light.
		Feet	Feet		Feet	Feet
Adams,	\$3,460	1,046,920	309,089	26.4	39,067	3,906
Amesbury,	9,740	692,516	111,948	22.7	29,421	3,681
Arlington,	3,177	272,205	65,612	18.8	14,450	2,605
Attleborough,	11,180	1,518,626	292,144	54.5	28,437	6,012
Beverly,	-	988,793	117,898	42.2	13,959	2,754
Boston,	19,011	10,055,784	926,568	220.0	44,069	4,216
Brockton,	35,329	985,710	222,138	50.8	19,414	3,074
Brookline,	-	966,553	113,643	30.7	21,952	3,164
Cambridge,	8,474	1,436,400	115,722	66.0	19,795	3,549
Charlestown,	-	1,871,325	292,403	95.7	16,448	3,427
Chelsea,	6,671	664,692	117,847	35.0	18,990	3,813
Chicopee,	-	2,385,481	44,054	57.1	41,618	3,939
Citizens' (Quincy),	5,333	444,711	58,348	30.4	13,381	2,085
Citizens' (Wakefield),	6,468	338,434	68,888	22.0	13,964	1,831
Clinton,	-	1,694,526	228,935	48.6	27,526	1,995
Cottage City,	-	741,615	230,083	71.2	9,499	1,712
Danvers,	6,845	496,012	131,211	39.3	12,625	1,539
Dedham,	8,007	442,369	124,042	22.9	17,900	2,475
Dorchester,	6,827	1,050,179	7,926	47.5	14,020	2,785
East Boston,	10,923	1,822,400	136,830	72.7	17,637	4,620
Easthampton,	8,241	1,010,205	183,151	47.8	21,133	1,873
Fall River,	13,889	2,354,129	376,400	57.2	38,346	2,715
Fitchburg,	-	1,352,197	114,117	51.1	25,294	2,738
Gloucester,	8,112	1,687,220	97,177	82.4	19,297	4,358
Greenfield,	11,063	613,743	127,468	46.8	13,496	3,807
Haverhill,	5,902	2,706,808	167,375	104.1	24,042	4,160
Holyoke,	-	2,700,083	243,253	81.9	32,820	4,002
Jamaica Plain,	8,823	1,316,428	127,461	50.4	17,310	3,083
Lawrence,	-	2,138,060	190,365	70.7	30,225	4,490
Lowell,	6,807	3,056,492	161,032	102.9	28,596	3,845
Lynn,	-	2,117,966	312,838	72.8	28,814	5,258
Malden,	3,833	532,980	25,081	31.2	17,092	3,117
Manufacturers' (Fall River),	10,246	2,746,946	176,496	57.0	44,918	2,216
Marblehead,	10,311	759,126	203,285	50.4	12,693	2,073
Marlborough,	17,301	1,660,104	232,668	61.6	26,606	2,872
Milford,	9,526	1,246,890	128,788	61.3	20,330	2,965
Miller's River (Athol),	-	834,085	55,197	42.1	19,809	3,347
Nantucket,	7,438	393,793	68,303	29.1	10,151	2,378
Natick,	6,115	684,721	56,673	44.8	14,293	1,788
New Bedford,	-	1,481,492	51,477	85.8	14,822	3,967
Newburyport,	-	992,855	257,897	54.0	18,382	3,739
Newton,	-	762,931	77,407	34.7	19,235	3,180
North Adams,	6,890	1,893,383	326,271	53.7	31,699	4,455
Northampton,	5,394	1,121,488	147,401	46.5	24,121	3,356
North Attleborough,	12,806	1,432,271	99,310	39.8	35,718	4,957
Norwood,	2,844	330,355	-	10.4	31,684	2,227
Pittsfield,	7,870	1,759,503	180,446	79.0	21,455	4,485
Plymouth,	11,167	1,107,215	44,008	64.9	17,060	2,662
Roxbury,	8,472	2,392,152	215,960	98.6	24,871	3,682
Salem,	11,529	1,388,093	239,640	94.0	14,417	3,034

Coal-gas Companies—Concluded.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas	Gas
	Capital.	Gas sold.	Gas un- accounted for.	Number of Consumers.	sold per Consumer.	sold per Meter Light.
		Feet	Feet		Feet	Feet
South Boston, . . .	\$17,047	2,210,860	164,612	77.3	23,419	4,620
Spencer, . . .	—	784,646	70,559	39.5	19,688	4,202
Springfield, . . .	13,806	1,986,859	79,665	83.7	22,714	3,790
Taunton, . . .	4,136	1,920,036	73,065	65.0	28,555	3,624
Waltham, . . .	—	1,571,677	49,923	53.7	27,921	4,263
Ware, . . .	—	1,991,334	186,140	66.2	30,071	2,771
Webster, . . .	—	631,144	110,800	57.3	10,925	2,171
Westfield, . . .	—	1,130,480	102,202	59.8	18,913	3,561
Woburn, . . .	7,309	1,283,300	86,078	70.8	18,118	3,179
Worcester, . . .	11,853	2,713,000	163,782	101.5	25,907	5,280

Oil-gas Companies.

Amherst, . . .	—	190,650	—	28.1	6,061	1,338
Chicopee Falls, . . .	—	662,657	—	69.6	9,535	1,907
Gardner, . . .	\$4,922	94,060	7,667	11.1	8,507	1,838
Great Barrington, . . .	5,555	407,777	—	55.5	7,340	1,261
Ipswich, . . .	8,832	511,972	—	33.5	14,758	1,252
Lee, . . .	—	—	—	41.6	—	—
Leominster, . . .	6,821	201,390	14,993	28.0	7,097	1,514
Lexington, . . .	6,838	330,557	—	36.4	6,020	1,556
Middleborough, . . .	—	—	—	—	5,316	1,020
Southbridge, . . .	—	644,703	—	89.3	7,217	1,253
Stoughton, . . .	—	—	—	—	—	—
Williamstown, . . .	—	—	—	—	6,304	1,904

The following table shows the number of tons of coal carbonized in 1889-90 and 1888-89, the kind and quantities of enricher used by the various coal-gas companies, and the percentage of cost of coal received from residuals:—

NAME OF COMPANY.	Number of Tons of Coal carbon- ized, Year ending June 30, 1890.	Number of Tons of Coal carbon- ized, Year ending June 30, 1889.	Enrichers used.	Cannel. Tons.	Naphtha. Gallons.	Residuum. Barrels.	Oil. Gallons.	Percentage of Cost of Coal received from Residual Products.
Adams,	678	681	Cannel,	58½	—	—	—	39.65
Arlington,	661	637	Oil,	—	—	—	998	23.92
Attleborough,	815	767	—	—	—	—	—	21.41
Beverly,	698	620	—	—	—	—	—	32.10
Boston,	116,565	110,118	Residuum,	945	739,338	574	—	40.07
Brookton,	1,600	1,436	Cannel, albertite, naphtha, residuum,	—	—	74	—	49.71
Brookline,	5,645	5,091	Residuum,	—	—	—	—	32.83
Cambridge,	10,909	10,277	Cannel, naphtha,	222	598	—	—	37.28
Charlestown,	7,561	7,302	Oil,	—	—	—	54,650	37.87
Chelsea,	3,634	3,886	Naphtha,	—	148,516	—	—	40.80
Chicopee,	1,024	775	Gas oil,	—	—	—	7,057	13.83
Citizens' (Quincy),	661	631	Naphtha, gas drip,	—	—	—	3,767	54.68
Citizens' (Wakefield),	630	708	—	—	—	—	—	5.89
Clinton,	910	842	Cannel and oil,	—	—	—	4,015	29.34
Danvers,	217	181	Residuum,	—	—	6	—	21.43
Dedham,	745	799	Residuum,	—	—	52	—	23.67
Dorchester,	196	5,631	Cannel,	9	—	—	—	10.89
East Boston,	3,850	3,920	Lima oil,	—	—	—	4,830	36.78
Easthampton,	421	444	Cannel, naphtha,	2	1,560	—	—	6.18
Fall River,	23,697	23,802	Naphtha, ³	—	—	—	—	20.41
Fitchburg,	1,400	1,421	Cannel,	152	—	—	—	45.60
Gloucester,	1,232	1,252	Cannel, gas oil,	30	—	—	4,063	33.99
Greenfield,	322	343	Residuum,	—	—	38	—	13.79
Haverhill,	5,350	4,059	Cannel,	249	—	—	—	31.58
Holyoke,	4,463	4,170	Cannel, crude oil,	24	—	—	10,164	33.72
Jamaica Plain,	3,559	3,250	Cannel,	212	—	—	—	27.71
Lawrence,	25,892	6,370	Cannel, oil,	205	—	—	46,150	48.16
Lowell,	20,904	18,223	Crude oil,	—	—	—	44,688	51.31
Lynd,	5,916	5,396	Lima oil,	—	—	—	437,790	47.54

Malden.	Manufacturers' (Fall River),	2,788	2,607	Oil,	103	11,152	36.31
Marblehead,		1,116	1,082	Camel,	—	—	21.99
Mattabourgh,		415	393	Residuum,	—	—	11.99
Millis,		521	498	Gas oil,	—	1,865	18.41
Millers' River (Athol),		950	943	Camel,	90	—	27.24
Nantucket,		278	239	—	—	—	—
Natick,		531	534	Gas oil,	—	—	5.04
New Bedford,		3,901	4,122	Camel, Lima oil,	—	2,360	16.63
Newburyport,		1,157	1,099	Camel, oil,	3	12,070	41.20
Newton,		4,584	4,268	Lima oil,	1	2,876	26.15
North Adams,		2,051	1,825	Camel,	68	22,180	30.33
Northampton,		1,004	1,029	Camel, oil,	88	4,225	25.30
North Attleborough,		1,204	1,119	Camel, gas oil,	30	—	26.15
Norwood,		268	248	—	—	393	29.67
Pittsfield,		1,651	1,422	Camel,	182	—	32.62
Plymouth,		414	406	Gas oil,	—	2,200	21.18
Roxbury,		9,675	14,269	Naphtha residuum,	—	—	40.08
Salem,		3,533	3,665	Camel,	286	—	38.35
South Boston,		7,335	6,654	Camel, residuum, naphtha,	8	1,401	42.21
Spencer,		744	750	Oil,	—	—	1.81
Springfield,		7,120	6,912	Gas oil,	—	44,016	44.07
Taunton,		3,504	3,396	Camel, naphtha,	—	42,504	21.55
Waltham,		2,448	2,588	Camel, Lima oil,	37	3,619	42.58
Ware,		477	433	—	17	2,353	21.44
Webster,		199	^a 121	Lima oil,	—	—	38.87
Westfield,		620	611	Camel, gas oil,	—	3,573	35.69
Woburn,		828	794	Naphtha, Lima oil,	32	800	41.41
Worcester,		9,121	8,373	—	—	34,040	—

¹ Includes amount used in water gas. ² Not including coal for water gas. ³ Used in water gas only. ⁴ Does not include quantity used for water gas.

^a Seven months only.

The following tables show the materials and quantity of each used in the manufacture of water and oil gas, also the process used and the quantity of water gas made:—

Water Gas.

NAME OF COMPANY.	Process used.	Materials used in Generator.	Quantity used. Tons.	Enricher used.	Quantity used. Gallons.	Gas made. Feet.
Amesbury, .	Lowe.					
Bay State, (Boston), .	Granger,	Anthracite, .	1 145 }	Petroleum, .	18,426 }	4,983,500
	Flannery,	Anthracite, .	2 3,015 }	Naphtha, .	6,151 }	
Charlestown,	Granger, .	Coke, .	3 - }	Crude oil, .	228,581 }	139,962,000
Cottage City, .	Loomis, .	Anthracite, .	4 140 }	Naphtha, .	453,400 }	9,042,000
Fall River, .	Lowe, .	Anthracite, .	5 471 }	Naphtha, .	48,516 }	1,563,300
		Coke, .	3 }	Petroleum, .	5,000 }	
Lawrence, .	Lowe, .	Coal, .	48 }		106,757 }	21,050,700
		Coke, .	6 - }	Petroleum, .	36,080 }	6,716,863
Lynn, .	Granger, .	Coke, .	7 - }	Lima oil, .	9,570 }	1,576,000
Spencer, .	Evans, .	Coke, .	8 - }	Petroleum, .	44,016 }	2,000,000
Worcester, .	Granger, .	Coke, .	9 - }	Naphtha, .	114,623 }	22,924,600

¹ 22 tons of screenings used for generating steam.

² 1,213 tons coke used for steam.

³ 268 chaldrons coke used in generator, steam obtained from electric-light boilers.

⁴ Steam from electric-light boilers.

⁵ For generating steam, 22 tons pea coal, 217 tons coke, and 21 tons screenings were used.

⁶ 7,783 bushels of coke used in generator, steam taken from electric-light boilers.

⁷ 1 to 1½ bushels per M in generator, coke for steam not given.

⁸ Made in works and not measured.

⁹ 21,618 bushels coke used in generator, and one-sixth of a bushel per M used for steam.

Oil Gas.

NAME OF COMPANY.	Materials used.	Quantity used. Gallons.	Fuel used.	Quantity used.
Amherst,	Naphtha, .	11,142	Coke,	35 tons.
Chicopee Falls,	Petroleum, .	28,797	Anthracite,	75 tons.
Gardner,	Naphtha, .	17,661	Wood,	105 cords.
Ipswich,	Petroleum, .	18,418	Coal,	73 tons.
Lee,	Petroleum, .	1 -	Anthracite and wood,	1 -
Leominster,	Petroleum, .	16,379	Cumberland coal,	83 tons.
Lexington,	Petroleum, .	10,433	Anthracite,	65 tons.
Southbridge,	Petroleum, .	11,975	Anthracite and wood,	52½ tons.
Stoughton,	Naphtha, .	3,258	Bituminous,	3 cords.
Williamstown,	Naphtha, .	2,800	Wood,	60 tons.
				12 cords.

¹ Not given.

STREET MAINS.

The returns by the various companies of their street mains continue to improve. During the year forty-seven companies laid about fifty-four miles of mains, varying in the several cases from less than one hundred feet to nearly seven miles.

The following table shows the lengths and sizes of the mains as returned by the companies : —

Leominster,	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
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¹ Includes 15,297 feet thirty inch main.

² Includes 26,074 feet eighteen inch and 27,349 feet thirty inch main.

³ Details not returned.

⁴ Includes 5,326 feet eighteen inch main.

HIGH-POWER GAS LAMPS.

The following table shows the number of Lungren or other high-power gas lamps in use June 30, 1890 :—

Adams,	65	Manufacturers' (Fall River), .	4
Attleborough,	2	Marblehead { Lungren,	2
Beverly,	15	{ Albo-carbon,	70
Brockton,	97	Marlborough,	75
Brookline,	4	Milford,	110
Cambridge,	144	Miller's River (Athol),	6
Chelsea,	24	Natick,	31
Chicopce,	2	New Bedford,	12
Clinton,	13	Newburyport,	1
Dedham,	19	Newton,	101
Dorchester,	6	North Adams,	130
East Boston,	160	No thampton,	22
Fall River,	25	North Attleborough,	77
Fitchburg,	7	Pittsfield,	16
Gloucester (Albo-carbon),	150	Plymouth,	82
Greenfield,	21	Salem,	10
Haverhill,	128	Springfield,	30
Holyoke,	3	Taunton,	50
Jamaica Plain,	2	Waltham,	30
Lawrence,	226	Ware,	4
Leominster,	2	Westfield,	25
Lowell,	26	Woburn,	2
Malden,	183	Worcester,	12

The companies reporting more than fifty gas stoves in use on June 30, 1890, are as follows :—

Chelsea,	about	60	Newton,	103
Citizens' (Quincy),		112	North Adams,	about 60
Fall River,		163	Northampton,	about 100
Fitchburg,		82	Plymouth,	82
Gloucester,		125	Salem,	about 100
Greenfield,		50	Spencer,	367
Holyoke,	about	300	Springfield,	1,764
Lawrence,	about	375	Taunton,	127
Lowell,		1,433	Waltham,	180
Lynn,		50	Westfield,	about 75
Natick,		53	Worcester,	965
New Bedford,		692		

PUBLIC LAMPS.

The number of public gas lamps supplied by the companies shows a greater decrease this year than before noted, the net loss being 1,776, as against 999 in the previous report.

The oil-gas companies show a gain of 9 for the year.

The following table shows the number of lamps supplied June 30, 1890, the net increase or decrease during the year, the average

price per thousand feet received from gas used in street lamps, and also the cost per thousand of the care of the lamps when this is done by the companies : —

PUBLIC LAMPS — *Coal-gas.*

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average Price received per M., including Expenses.	Expense of Lighting and Care of Lamps. Per M.
		Increase.	Decrease.		
Adams,	—	—	64	\$2 12	—
Amesbury,	14	3	—	2 00	\$0 65
Beverly,	51	4	—	2 22	04
Boston,	2,984	—	44	1 00	—
Brookline,	722	—	98	1 97	20
Cambridge,	709	—	153	1 36	—
Charlestown,	732	—	186	1 55	—
Chelsea,	—	—	511	1 80	—
Chicopee,	4	—	—	2 00	—
Citizens' (Quincy),	69	17	—	1 43	—
Citizens' (Wakefield),	76	—	9	2 29	—
Clinton,	6	—	—	2 50	—
Cottage City,	20	9	—	2 03	—
Dedham,	—	—	109	2 17	—
Dorchester,	1,482	178	—	1 80	—
East Boston,	695	5	—	1 60	—
Fall River,	305	—	23	1 49	—
Fitchburg,	62	—	—	1 60	—
Gloucester,	100	—	—	1 50	—
Haverhill,	201	—	31	1 22	—
Holyoke,	76	—	—	1 33	—
Jamaica Plain,	775	35	—	1 86	—
Lowell,	952	9	—	1 10	—
Lynn,	—	—	264	1 77	—
Malden,	2	—	—	1 60	—
Manufacturers' (Fall River),	84	—	16	1 50	—
Marblehead,	79	—	—	2 40	81
Marlborough,	8	—	—	2 27	—
Milford,	41	41	—	1 90	63
Nantucket,	76	—	—	2 11	48
Natick,	33	4	—	2 03	—
New Bedford,	447	—	32	1 22	—
Newton,	787	34	—	1 59	68
North Adams,	109	—	7	1 59	35
Pittsfield,	30	—	40	1 50	37
Plymouth,	—	—	43	—	—
Roxbury,	1,904	56	—	1 49	—
Salem,	87	—	11	1 80	—
South Boston,	729	—	36	1 50	—
Springfield,	54	—	430	1 25	—
Taunton,	123	—	24	1 43	—
Waltham,	175	—	1	2 76	1 84
Worcester,	507	—	50	1 50	—
	15,310				

Oil-gas.

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average Price received per M, including Expenses.	Expense of Lighting and Care of Lamps, Per M.
		Increase.	Decrease.		
Amherst,	45	9	—	\$5 70	—
Chicopee Falls, . . .	18	—	—	—	—
Ipswich,	12	—	—	3 00	—
Lexington,	87	—	—	2 61	—
Middleborough, . . .	20	—	—	5 00	—
Southbridge,	1	—	—	3 00	—
	183				

PURITY OF GAS.

The law provides that when the gas of any company is found on three consecutive inspections to give less light than fifteen standard English candles, or to contain more than twenty grains of sulphur or ten grains of ammonia per hundred cubic feet of gas, or more than ten per cent. of carbonic oxide or any sulphuretted hydrogen, a fine of one hundred dollars shall be paid by such company to the city or town supplied by it. (Pub. Stats., chap. 61, sect. 14.)

By chapter 252 of the Acts of 1890, the provision of the Public Statutes relating to carbonic oxide was stricken out, so that it is no longer illegal to manufacture water gas containing more than ten per cent. of this substance.

The following table shows the amount of impurities found on the given dates, and the whole number of inspections during the year, of the gas of the several companies therein named, as reported to this Board by the State Inspector of Gas:—

Kind of Impurities.	NAME OF COMPANY.	Amount of Impurity.	Date when found.	Total Number of Inspections during the Year.
Deficient candle-power.	Cottage City,	13.8	Sept. 12,	2
	Danvers,	14.8	Oct. 29,	2
Sulphur, grains per 100 cu. ft.	Citizens' (Quincy),	24.1	Nov. 28,	3
Ammonia, grains per 100 cu. ft.	Chelsea,	25.6	Apr. 25,	7
	Citizens' (Wakefield), . . .	15.6	Sept. 4,	3
	East Boston,	11.5	May 27,	8
	East Boston,	19.8	July 18,	—
	Greenfield,	37.0	Oct. 31,	3
	Jamaica Plain,	23.8	Aug. 27,	7
	Lowell,	12.0	Mar. 12,	35
	Malden,	16.1	Feb. 27,	6
	Manufacturers' (Fall River), .	11.2	Apr. 11,	4
	Manufacturers',	10.7	June 10,	—
	Milford,	26.3	Apr. 22,	3
	Nantucket,	25.0	June 27,	2
	New Bedford,	10.9	Nov. 13,	9
	Salem,	11.2	Aug. 28,	8
	South Boston,	15.4	May 14,	12
	South Boston,	11.9	June 7,	—
Sulphuretted Hydrogen.	Springfield,	12.9	July 11,	15
	Waltham,	11.4	May 20,	6
	Waltham,	11.7	Dec. 4,	—
	Adams,	Trace,	May 21,	3
	Charlestown,	"	Mar. 4,	14
	Citizens' (Quincy),	"	Nov. 28,	3
	Gloucester,	"	Nov. 11,	4
	Newburyport,	"	Nov. 11,	3
	Northampton,	"	Dec. 3,	3
	Salem,	"	Nov. 25,	8
	Spencer,	"	Nov. 6,	4
	Spencer,	"	Dec. 12,	—
	Springfield,	"	Mar. 4,	15

Of the inspections for ammonia cited above, the two at South Boston and the two of the Manufacturers' Company at Fall River were consecutive, as was also the case with the two for sulphuretted hydrogen at Spencer.

A comparison of the inspections made during the five years from 1886 to 1890, inclusive, shows the following results:—

	1886.	1887.	1888.	1889.	1890.
Number of inspections made,	426	445	438	451	443
Number of companies subject to inspection,	58	59	60	59	59
Number of companies showing deficiency in candle-power,	1	1	1	4	2
Highest candle-power, not including ten oil-gas companies,	24.0	23.3	21.6	22.1	25.4
Lowest candle-power, not including ten oil-gas companies,	14.7	12.5	12.8	14.2	13.8
Average candle-power, not including ten oil-gas companies,	17.76	17.74	17.60	17.39	17.79
Number of companies showing sulphuretted hydrogen,	4	4	1	4	9
Number of companies showing excess of sulphur,	2	4	1	1	1
Number of companies showing excess of ammonia,	15	9	13	9	15
Number of companies showing excess of carbonic oxide,	4	4	8	7	—
Largest amount of sulphur,	29.2	25.2	23.1	22.9	24.1
Smallest amount of sulphur,	2.5	1.4	3.2	1.5	1.4
Average amount of sulphur,	10.42	8.81	9.26	7.32	10.08
Largest amount of ammonia,	58.7	43.4	76.0	32.3	37.0
Smallest amount of ammonia,	1.—	1.—	1.—	1.—	1.—

The inspections of the ten oil-gas companies showed:—

	1886.	1887.	1888.	1889.	1890.
Average amount of ammonia,	4.05	3.29	3.07	2.82	3.01
Highest candle-power,	58.6	59.7	52.4	55.0	70.5
Lowest candle-power,	23.0	22.1	21.5	20.8	21.1
Average candle-power,	30.35	30.36	33.73	34.72	39.04

ELECTRIC LIGHT.

In the report of last year a complete list of the electric light companies in the State was given. Since then the following have been incorporated : —

NAME OF COMPANY.	LOCATION.	CAPITAL.
Back Bay Incandescent Light Co.,	Boston,	\$5,000
Citizens' Electric Co. of Milton,	Milton,	10,000
Cohasset Electric Co.,	Cohasset,	30,000
Holyoke Electric Co.,	Holyoke,	10,000
Methuen Gas Light Co.,	Methuen,	25,000
Milton Light and Power Co.,	Milton,	50,000
Pittsfield Electric Co.,	Pittsfield,	100,000
Reading Electric Light and Power Co.,	Reading,	12,000
Swampscott Electric Co.,	Swampscott,	10,000
Ware Electric Co.,	Ware,	20,000
Ware Power and Improvement Co.,	Ware,	10,000

The following table gives the names of those companies in active operation on June 30 last, together with the localities supplied and the amount of capital stock : —

NAME OF COMPANY.	LOCALITIES SUPPLIED.	CAPITAL.
Adams Electric Light and Power Co.,	Adams,	\$8,500
Amherst Gas Co.,	Amherst,	—
Andover Electric Co.,	Andover,	30,000
Beverly Gas Light Co.,	Beverly,	—
Blue Hill Electric Co.,	Canton,	20,000
Boston Electric Light Co.,	Boston,	1,000,000
Bridgewater Electric Co.,	Bridgewater,	15,000
Brookline Gas Light Co.,	Brookline, Boston	Brigh-
	ton,	—
Cambridge Electric Light Co.,	Cambridge,	200,000
Charlestown Gas Co.,	Charlestown,	—
Chelsea Gas Light Co.,	Chelsea,	—
Chicopee Electric Co.,	Chicopee,	10,000
Clinton Gas Light Co.,	Canton,	—
Cottage City Gas and Electric Light Co.,	Cottage City,	—
Dedham Electric Co.,	Dedham,	60,000
Edison Electric Illuminating Co. of Boston,	Boston,	1,160,000
Edison Electric Illuminating Co. of Brock-	Brockton,	85,000
ton,		
Edison Electric Illuminating Co. of Fall	Fall River,	81,000
River,		
Edison Electric Illuminating Co. of Law-	Lawrence,	65,000
rence,		
Edison Electric Illuminating Co. of New	New Bedford,	150,000
Bedford, ¹		
Electric Light and Patent Flooring Co.,	Amesbury,	38,100
Fall River Electric Light Co.,	Fall River,	30,000
Fitchburg Gas Co.,	Fitchburg,	—
Framingham Electric Co.,	Frammingham, Ashland,	80,000
Franklin Electric Light Co.,	Turner's Falls,	10,000
Gardner Electric Co.,	Gardner,	28,700
Gloucester Electric Co.,	Gloucester,	20,000

¹ Taken over July 1, 1890, by the New Bedford Gas Light Co.

NAME OF COMPANY.	LOCALITIES SUPPLIED.	CAPITAL.
Great Barrington Electric Light Co.,	Great Barrington,	\$22,300
Greenfield Electric Light and Power Co.,	Greenfield, Deerfield,	30,000
Haverhill Electric Co.,	Haverhill,	85,000
Holyoke Water Power Co.,	Holyoke,	-
Hudson Electric Light Co.,	Hudson,	9,125
Hyde Park Electric Light Co.,	Hyde Park,	50,000
Lawrence Gas Co.,	Lawrence, No. Andover,	-
Lee Electric Co.,	Lee,	-
Leicester Electric Co.,	Leicester,	4,000
Leominster Electric Light and Power Co.,	Leominster,	50,000
Lowell Electric Light Corporation,	Lowell, Dracut, Tyngsboro,	197,700
Lynn Gas and Electric Co.,	Lynn, Swampscott,	-
Malden Electric Co.,	Malden, Melrose, Medford,	-
	Everett,	100,000
Marlborough Electric Co.,	Marlborough,	30,000
Middleborough Electric Light and Power Co.,	Middleborough,	40,000
Milford Electric Light and Power Co.,	Milford, Hopedale,	39,500
Millbury Electric Co.,	Millbury,	15,000
Miller's River Gas Light Co.,	Athol,	-
Nantucket Electric Light Co.,	Nantucket,	25,000
Natick Electric Co.,	Natick, Wayland,	40,000
New Bedford Gas Light Co.,	New Bedford, Fairhaven,	-
Newburyport Gas and Electric Co.,	Newburyport,	-
Newton and Watertown Gas Light Co.,	Newton, Watertown,	-
North Adams Electric Light and Power Co., ¹	North Adams,	7,500
Northampton Electric Lighting Co.,	Northampton,	58,700
North Attleborough Steam and Electric Co.,	Attleborough, North Attleborough, Wrentham,	61,600
North Shore Electric Co.,	Revere, Winthrop,	80,000
Orange Electric Light Co.,	Orange,	25,000
Palmer Electric Co.,	Palmer,	30,000
People's Electric Co.,	Easthampton,	5,000
Pittsfield Electric Light Co.,	Pittsfield,	5,000
Pittsfield Illuminating Co.,	Pittsfield,	25,000
Plymouth Electric Light Co.,	Plymouth,	40,000
Quincy Electric Light and Power Co.,	Quincy,	50,000
Salem Electric Lighting Co.,	Salem, Peabody,	140,000
Somerville Electric Light Co.,	Somerville, Arlington, Belmont,	120,000
Southbridge Gas and Electric Co.,	Southbridge,	-
South Hadley Falls Electric Light Co.,	South Hadley,	7,000
Spencer Gas Co.,	Spencer,	-
Stoughton Light, Heat and Power Co.,	Stoughton,	-
Suburban Light and Power Co.,	Boston,	83,000
Taunton Electric Lighting Co.,	Taunton,	30,000
Union Electric Light Co.,	Franklin,	20,000
United Electric Light Co.,	Springfield,	300,000
Uxbridge and Northbridge Electric Light Co.,	Uxbridge, Northbridge,	20,000
Waltham Gas Light Co.,	Waltham,	-
Walworth Light and Power Co.,	Boston,	15,000
Ware Electric Light Co.,	Ware,	15,000
Webster Electric Co.,	Webster, Dudley,	-
Westborough Electric Light and Power Co.,	Westborough,	22,700
Westfield Gas Light Co.,	Westfield,	-
Weymouth Light and Power Co.,	Weymouth, Hingham,	50,000
Whitman Electric Co.,	Whitman,	20,000
Winchendon Electric Light and Power Co.,	Winchendon,	12,000
Woburn Electric Light Co.,	Woburn, Winchester, Stoneham,	120,000
Worcester Electric Light Co.,	Worcester,	200,000

¹ Taken over July 1, 1890, by the North Adams Gas Light Co.

In the case of the several gas companies doing electric lighting, the capital will be found in the table of gas companies.

The following companies have bonds and notes outstanding:—

Adams,	\$8,300 00
Andover,	24,400 00
Boston,	299,100 00
Cambridge,	50,000 00
Chicopee,	2,900 00
Dedham,	10,686 53
Edison (Boston),	185,000 00
Edison (Brockton),	92,500 00
Edison (Fall River),	17,000 00
Edison (Lawrence),	39,200 00
E. L. & Patent Flooring (Amesbury),	53,415 00
Fall River,	18,500 00
Framingham,	53,725 00
Franklin (Turner's Falls),	618 00
Gardner,	37,500 00
Gloucester,	4,116 40
Great Barrington,	3,300 00
Greenfield,	8,000 00
Haverhill,	19,000 00
Hudson,	7,000 00
Hyde Park,	21,000 00
Leicester,	21,209 45
Leominster,	15,000 00
Lowell,	96,000 00
Malden,	137,609 56
Marlborough,	24,700 00
Middleborough,	30,000 00
Milford,	14,688 13
Millbury,	16,000 00
Nantucket,	23,450 00
Natick,	46,000 00
North Adams,	7,000 00
Northampton,	24,318 35
North Attleborough,	41,826 06
North Shore (Revere),	79,144 89
Orange,	15,000 00
Palmer,	20,700 00
Pittsfield Electric Light Co.,	8,600 00
Pittsfield Illuminating Co.,	15,736 46
Plymouth,	31,500 00
Quincy,	27,491 36
Salem,	47,500 00
Somerville,	56,978 21
Taunton,	3,000 00
Union (Franklin),	30,000 00
United (Springfield),	73,000 00
Uxbridge and Northbridge,	8,000 00

Westborough,	\$19,800 00
Weymouth,	65,000 00
Woburn,	128,430 90
Worcester,	10,000 00

In these amounts, the borrowed money which the gas companies have invested in electric lighting is not included, it being already given in the table relating to gas companies.

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value at par of the stock held in the State on June 3, 1890 :—

NAME OF COMPANY.	Whole Number of Stockholders.	Number resident in Massachusetts.	Value of Stock held in Massachusetts.
Adams,	7	7	\$8,500
Andover,	37	36	26,000
Boston,	362	133	408,500
Blue Hill (Canton),	—	—	—
Bridgewater,	14	14	15,000
Cambridge,	34	34	200,000
Chicopee,	6	6	10,000
Dedham,	16	16	60,000
Edison (Boston),	77	66	837,300
Edison (Brockton),	24	22	59,550
Edison (Fall River),	51	46	52,200
Edison (Lawrence),	17	14	45,575
Edison (New Bedford),	110	105	127,900
E. L. & Patent Flooring Company (Amesbury),	22	20	35,600
Fall River,	50	41	70,500
Framingham,	11	11	80,000
Franklin (Turner's Falls),	28	28	10,000
Gardner,	35	34	28,400
Gloucester,	7	7	20,000
Great Barrington,	19	8	6,600
Greenfield,	41	32	23,400
Haverhill,	36	36	85,000
Hudson,	13	13	9,125
Hyde Park,	—	—	—
Leicester,	12	12	4,000
Leominster,	8	7	20,000
Lowell,	318	299	144,600
Malden,	30	29	9,230
Marlborough,	10	9	29,000
Middleborough,	10	10	40,000
Milford,	21	21	39,500
Millbury,	—	—	15,000
Nantucket,	7	7	12,000
Natick,	7	7	40,000
North Adams,	8	8	7,500
Northampton,	68	68	58,700
North Attleborough,	13	12	61,300

NAME OF COMPANY.	Whole Number of Stockholders.	Number resident in Massachusetts.	Value of Stock held in Massachusetts.
North Shore (Revere),	12	12	\$80,000
Orange,	4	4	25,000
Palmer,	10	9	19,900
People's (Easthampton),	11	11	5,000
Pittsfield Electric Light Co.,	4	4	5,000
Pittsfield Illuminating Co.,	5	4	19,000
Plymouth,	—	—	—
Quincy,	88	88	50,000
Salem,	103	101	135,000
Somerville,	163	159	118,600
South Hadley Falls,	3	3	7,000
Taunton,	15	15	30,000
Union (Franklin),	4	4	20,000
United (Springfield),	84	80	275,000
Uxbridge and Northbridge,	46	46	20,000
Walworth (Boston),	8	8	15,000
Ware,	20	20	15,000
Westborough,	19	18	22,690
Weymouth,	10	10	50,000
Whitman,	15	15	20,000
Winchester,	8	7	700
Woburn,	58	54	115,200
Worcester,	81	79	199,500

The following statistics show the aggregate results of the operation of the electric light central stations in the State for the year ending June 30, 1890: —

RECEIPTS:

For light and power,	\$1,908,894 00
From other sources,	12,808 05
	<hr/>
	\$1,920,702 05

EXPENSES:

For manufacture,	\$752,891 18
distribution,	281,046 33
office expenses and management,	116,550 92
taxes,	67,620 91
miscellaneous,	122,945 26
	<hr/>
	\$1,340,814 60

Leaving a balance of \$579,887 45

The above figures show the earnings of the electric light companies and of the electric departments of gas companies. The amount of net earnings of the electric departments of gas companies was \$110,871.40, leaving as the earnings of the electric companies \$469,015.05 applicable to the payment of interest and dividends.

The following table shows the value of the plant of each company, as assessed by the local authorities :—

NAME OF COMPANY.	Assessed Valuation.	NAME OF COMPANY.	Assessed Valuation.
Adams,	\$9,500	Milford,	\$26,500
Andover,	12,700	Millbury,	15,000
Boston,	525,200	Nantucket,	6,000
Bridgewater,	15,000	Natick,	30,000
Cambridge,	107,000	North Adams,	2,000
Chicopee,	7,500	Northampton,	43,000
Dedham,	30,000	North Attleborough,	47,550
Edison (Boston),	-	North Shore (Revere),	60,000
Edison (Brockton),	48,225	Orange,	7,500
Edison (Fall River),	53,000	Palmer,	6,600
Edison (Lawrence),	35,000	People's (Easthampton),	4,500
E. L. and Patent Flooring (Amesbury),	-	Pittsfield E. L. Co.,	10,000
Fall River,	59,200	Pittsfield Illuminating Co.,	10,000
Framingham,	40,000	Plymouth,	26,400
Franklin (Turner's Falls),	9,000	Quincy,	33,800
Gardner,	25,000	Salem,	163,000
Gloucester,	7,500	Somerville,	49,900
Great Barrington,	3,500	South Hadley Falls,	3,500
Greenfield,	4,000	Taunton,	19,000
Haverhill,	43,100	Union (Franklin),	13,600
Hudson,	2,500	United (Springfield),	195,000
Hyde Park,	50,000	Uxbridge & Northbridge,	15,000
Leicester,	15,640	Ware,	-
Leominster,	22,200	Westborough,	-
Lowell,	72,400	Weymouth,	40,100
Malden,	100,000	Whitman,	12,000
Marlborough,	11,000	Woburn,	47,000
Middleborough,	-	Worcester,	167,000

The following table shows the amount paid by each company for taxes :—

NAME OF COMPANY.	Taxes paid.	NAME OF COMPANY.	Taxes paid.
Adams,	\$76 78	Framingham,	\$658 96
Andover,	294 40	Franklin (Turner's Falls),	84 31
Beverly,	207 69	Gardner,	400 21
Boston,	17,361 24	Gloucester,	303 73
Brookline,	1,357 81	Great Barrington,	234 40
Cambridge,	2,121 90	Greenfield,	218 01
Charlestown,	1,232 10	Haverhill,	1,344 06
Chelsea,	1,167 44	Holyoke,	420 66
Chicopee,	125 18	Hudson,	46 52
Clinton,	171 19	Hyde Park,	592 68
Cottage City,	53 39	Lawrence,	1,283 58
Dedham,	375 26	Lee,	34 20
Edison (Boston),	6,940 67	Leicester,	47 08
Edison (Brockton),	703 45	Leominster,	316 59
Edison (Fall River),	846 38	Lowell,	1,165 64
Edison (Lawrence),	820 34	Lynn,	2,269 70
Edison (New Bedford),	1,207 47	Malden,	1,527 80
E. L. & Patent Floor Co. (Amesbury),	582 66	Marlborough,	389 04
Fall River,	1,887 28	Milford,	390 91
Fitchburg,	314 64	Millbury,	184 68
		Miller's River (Athol),	78 06

NAME OF COMPANY.	Taxes paid.	NAME OF COMPANY.	Taxes
Nantucket,	\$74 75	South Hadley Falls, . .	\$120 27
Natick,	336 00	Spencer,	183 37
New Bedford,	3,324 14	Stoughton,	63 49
Newton,	727 93	Taunton,	472 02
North Adams,	136 52	Union (Franklin), . . .	184 10
Northampton,	660 01	United (Springfield), . .	2,244 17
North Attleborough, . .	771 79	Waltham,	641 59
North Shore (Revere), .	561 08	Walworth (Boston), . . .	11 44
Orange,	270 35	Ware,	151 30
Palmer,	382 33	Webster,	303 57
People's (Easthampton), .	71 72	Westborough,	103 95
Pittsfield E. L. Co., . .	167 02	Westfield,	258 16
Pittsfield Illuminating Co.,	421 46	Whitman,	276 66
Quincy,	479 22	Woburn,	950 26
Salem,	1,229 51	Worcester,	2,401 24
Somerville,	1,173 78		

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table : —

NAME OF COMPANY.	Rate Per Cent.	Amount of Dividends.
Boston,	6	\$60,000 00
Edison (Boston),	2½	12,500 00
Edison (Fall River),	3	2,448 00
Edison (New Bedford),	6	8,000 00
E. L. and Patent Flooring (Amesbury), . .	3	1,143 00
Fall River,	8	7,200 00
Franklin (Turner's Falls),	4	200 00
Great Barrington,	3	480 00
Greenfield,	3	450 00
Haverhill,	5	4,250 00
Lowell,	5	9,687 00
Malden,	8	8,000 00
Northampton,	5	2,935 00
People's (Easthampton),	3	150 00
Pittsfield, E. L. Co,	10	500 00
Salem,	4	5,600 00
Somerville,	4½	5,400 00
Taunton,	7	2,100 00
United (Springfield),	6	13,015 00
Westborough,	4	1,000 00
Woburn,	1½	900 00
Worcester,	5½	8,750 00
		\$154,708 00

The following table shows the system used, the maximum dynamo capacity and nominal candle-power of the lamps of each company, June 30, 1890 : —

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
Adams,	Thomson-Houston, .	{ 45 500	1,200 16
Andover,	Thomson-Houston, .	{ 50 1,300	1,200 16
Amherst,	Westinghouse, . .	1,500	16
Beverly,	Thomson-Houston, .	{ 35 650	2,000 16
Blue Hill (Canton), . .	{ Waterhouse, . . . Westinghouse, . . .	{ 55 750	2,000 16
	{ Thomson-Houston, . .	1,415	2,000
	{ Brush,	1,455	2,000
Boston,	{ American,	150	2,000
	{ Thomson-Houston, . .	2,900	16
	{ Weston,	1,540	16
	{ Sun,	900	16
Bridgewater,	{ Waterhouse,	35	2,000
	{ Westinghouse,	750	16
	{ American,	220	2,000
	{ Thomson-Houston, . .	100	2,000
Brookline,	{ Westinghouse,	65	2,000
	{ Weston,	300	16
	{ Thomson-Houston, . .	1,000	16
		{ 150 180	2,000 1,200
Cambridge, ¹	Thomson-Houston, .	{ 2,600	16
Charlestown,	Brush,	240	2,000
Chelsea,	Thomson-Houston, .	{ 250 1,300	1,200 16
Chicopee,	Thomson-Houston, .	50	1,200
Clinton,	{ Schuyler,	90	1,200
	{ Thomson-Houston, . .	650	16
Cottage City,	Ball,	60	1,600
Dedham,	Thomson-Houston, .	{ 60 1,300	1,200 16
Edison (Boston),	Edison,	25,600	16
	{ Thomson-Houston, . .	110	2,000
Edison (Brockton), ² . .	{ Edison,	2,200	16
	{ Edison Municipal, . .	880	15
Edison (Fall River), . .	Edison,	4,640	16
	{ American,	50	2,000
Edison (Lawrence), . . .	{ Edison,	4,000	16
	{ Edison Municipal, . .	1,250	16
	{ American,	110	2,000
Edison (New Bedford), . .	{ Edison,	7,440	16
E. L. and Patent Flooring Co. (Amesbury),	Thomson-Houston, .	{ 90 500	1,200 16

¹ Motor generators 680 H. P.² Motor generators 100 H. P.

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
Fall River,	Thomson-Houston, .	100	2,000
		226	1,200
Fitchburg,	Thomson-Houston, .	225	1,200
		1,000	16
Framingham,	Thomson-Houston, .	120	1,200
		2,450	16
Franklin (Turner's Falls),	Thomson-Houston, .	30	2,000
		600	16
Gardner,	Thomson-Houston, .	100	1,200
		1,000	16
Gloucester,	Thomson-Houston, .	138	1,200
		500	16
Great Barrington, . . .	{ Schuyler,	60	1,500
	{ Edison,	500	16
	{ Westinghouse, . . .	500	16
Greenfield,	{ Thomson-Houston, .	45	1,200
	{ Westinghouse, . . .	800	16
		750	16
Haverhill,	{ Thomson-Houston, .	75	2,000
		95	1,200
		800	16
	{ Brush,	50	2,000
Holyoke,	{ Schuyler,	386	2,000
	{ Edison,	1,000	16
Hudson,	Thomson-Houston, .	45	1,200
		650	16
	{ American,	50	2,000
Hyde Park,	{ Thomson-Houston, .	150	2,000
		1,800	16
Lawrence,	Thomson-Houston, .	200	2,000
Lee,	Thomson-Houston, .	650	16
Leicester,	Thomson-Houston, .	800	16
Leominster, ¹	Thomson-Houston, .	100	1,200
		1,300	16
Lowell,	Thomson-Houston, .	505	2,000
		3,200	16
Lynn, ²	Thomson-Houston, .	315	2,000
		3,250	16
Malden,	Thomson-Houston, .	240	1,200
		3,700	16
Marlborough,	{ Schuyler,	55	2,000
	{ Edison,	95	1,200
		1000	16
Middleborough,	Thomson-Houston, .	30	1,200
		650	16
Milford,	Thomson-Houston, .	95	1,200
		750	16
Millbury,	Thomson-Houston, .	50	1,200
		650	16
Miller's River (Athol), .	Thomson-Houston, .	25	2,000
Nantucket,	Thomson-Houston, .	93	1,200
		1,150	16

¹ Motor generators 50 H. P.² Motor generators 255 H. P.

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- power.
Natick, ¹	Thomson-Houston, .	180 3,000	1,200 16
New Bedford, ²	Thomson-Houston, .	265 118	2,000 1,200
	Westinghouse, . . .	100 5,600	2,000 16
	Thomson-Houston, .	170 800	1,200 16
Newburyport,	Thomson-Houston, .	95 3,000	1,200 16
Newton,	Thomson-Houston, .	90 500	1,200 16
North Adams,	Thomson-Houston, .	140 1,950	1,200 16
North Attleborough, . .	Schuyler,	90	1,200
	Thomson-Houston, .	310	1,200
North Shore, ³	Thomson-Houston, .	200 1,800	1,200 16
	Thomson-Houston, .	50 500	1,200 16
Orange,	Thomson-Houston, .	50 650	1,200 16
Palmer,	Waterhouse,	40	1,800
People's (Easthampton), .	Thomson-Houston, .	125 500	1,200 16
Pittsfield E. L. Co., . .	Westinghouse, . . .	2,250 80	16 1,200
Pittsfield Illuminating Co.,	Thomson-Houston, .	1,000 110	16 1,200
Plymouth, ²	Thomson-Houston, .	360 1,950	2,000 16
Quincy,	Thomson-Houston, .	350 1,000	2,000 16
Salem,	Thomson-Houston, .	50 600	2,000 25
	Thomson-Houston, .	100 600	1,200 16
	Thomson-Houston, .	900 70	16 1,200
Southbridge,	Ball,	70 70	800 2,000
South Hadley Falls, . .	Waterhouse,	70 255	2,000 16
Spencer,	Westinghouse, . . .	3,750 54	16 2,000
Stoughton,	Arnoux Hochhausen, .	135 600	1,200 16
Suburban (Boston), . .	Brush,	60 1,150	1,200 16
	Thomson-Houston, .	530 4,300	1,200 16
United (Springfield), .	Thomson-Houston, .	530 4,300	1,200 16

¹ Motor generators 80 H. P. ² Motor generators 130 H. P.³ Motor generators 160 H. P.

NAME OF COMPANY.	System used,	Maximum Dynamo Capacity.	Nominal Candle- power.
Uxbridge and Northbridge,	Westinghouse, . . .	{ 60 750 145	2,000 16 1,200
Waltham,	Thomson-Houston, . .	{ 400 650	20 16
Walworth (Boston), . .	{ American, Thomson-Houston, . .	{ 75 900	1,200 16
Ware,	Thomson-Houston, . .	{ 50 500	1,200 16
Webster,	Thomson-Houston, . .	{ 80 500	1,200 20
Westborough,	Thomson-Houston, . .	{ 50 950	1,200 16
Westfield,	{ Schuyler, Thomson-Houston, . .	{ 60 45 500	2,000 1,200 16
Weymouth,	Thomson-Houston, . .	{ 200 1,300	1,200 16
Whitman,	Thomson-Houston, . .	{ 50 500	1,200 16
Winchendon,	Thomson-Houston, . .	{ 30 650	1,200 16
Woburn,	{ Brush, Thomson-Houston, . .	{ 45 185 100	1,200 2,000 1,200
	Edison,	{ 1,800 1,000	16 16
Worcester,	{ Thomson-Houston, . . Westinghouse, . . .	{ 485 800 750	2,000 20 16

The following table shows the number of electro lights of various candle-power represented by the dynamo capacity, June 30, 1888-89 and 1890:—

	1888.	1889.	1890.
16 candle-power,	52,075	80,075	140,870
20 " "	1,200	2,800	1,700
15 " "	880	880	880
2,000 " "	5,846	6,978	8,425
1,200 " "	2,757	4,206	6,085
1,600 " "	110	130	60
1,500 " "	—	35	60
1,800 " "	—	40	40
800 " "	—	140	70

The following table shows the number of boilers, their total rated horse-power, the number of engines, and the total rated horse-power of the same, and the number of dynamos of the different companies on June 30 last; also the number of tons of coal used during the year ending on that day:—

NAME OF COMPANY.	Number of Boilers	Total rated Horse-power.	Number of Engines.	Total rated Horse-power.	Number of Dynamos.	Coal used. Tons.
Adams,	2	150	2	225	2	477
Amherst,	1	100	1	150	1	¹ 247
Andover,	2	200	2	180	3	² 60
Beverly,	1	50	1	35	2	³ 110
Blue Hill (Canton),	1	100	1	125	3	⁴ —
Boston,	23	2,825	34	3,341	77	16,589
Bridgewater,	1	50	1	80	2	⁵ 82
Brookline,	2	250	5	460	9	⁶ —
Cambridge,	8	1,000	6	1,140	18	4,300
Charlestown,	4	410	4	240	8	⁷ —
Chelsea,	2	250	3	340	7	⁸ 335
Chicopee,	1	100	1	65	1	⁹ —
Clinton,	1	75	1	75	3	230
Cottage City,	1	60	1	50	2	¹⁰ 60
Dedham,	2	220	2	170	4	¹¹ 177
Edison (Boston),	10	1,600	16	2,160	32	8,000
Edison (Brockton),	4	390	5	475	11	2,185
Edison (Fall River),	4	424	4	460	8	1,209
Edison (Lawrence),	4	452	6	530	9	1,761
Edison (New Bedford),	4	500	5	625	13	¹² 597
Electric Light & Patent Flooring (Amesbury),	2	250	2	185	4	1,084
Fall River,	3	300	5	310	7	928
Fitchburg,	3	300	3	300	6	¹³ 244
Framingham,	2	250	2	250	7	¹⁴ 341
Franklin (Turner's Falls),	¹⁵ —	—	—	—	1	—
Gardner,	2	160	3	200	5	588
Gloucester,	2	185	2	128	4	¹⁶ 209
Great Barrington,	1	95	2	160	5	502
Greenfield,	2	225	3	225	4	¹⁷ 460
Haverhill,	3	375	3	365	7	1,325
Holyoke,	¹⁸ —	—	—	—	16	—

¹ Works in operation only 10 months.² Also 65 tons screenings.³ Also 3,210 bushels coke.⁴ Not yet in operation.⁵ Plant started in April.⁶ 104,400 bushels of coke.⁷ 913 tons of coke; steam used in gas works also.⁸ Also 125 tons screenings and 20,645 bushels of coke.⁹ 7,700 bushels coke.¹⁰ Plant only runs in summer.¹¹ For 6 months only.¹² Also 1,142 tons screenings.¹³ Also 21,635 bushels of coke.¹⁴ Also 715 tons of sparks and screenings.¹⁵ Water wheel, 40 H. P.¹⁶ Also 181 tons screening.¹⁷ Also 50 cords of wood.¹⁸ 2 water wheels, 370 H. P.

NAME OF COMPANY.	Number of Boilers.	Total rated Horse-power.	Number of Engines.	Total rated Horse-power.	Number of Dynamoes.	Coal used. Tons.
Hudson,	1	80	1	60	2	149
Hyde Park,	2	250	3	375	6	¹ 529
Lawrence,	2	250	2	200	4	² 221
Lee,	2	160	³ 2	130	1	23
Leicester,	1	80	⁴ 1	60	2	220
Leominster,	2	250	2	190	5	275
Lowell,	6	540	4	800	16	3,450
Lynn,	5	750	5	1,150	16	2,378
Malden,	4	500	6	525	11	⁵ —
Marlborough,	2	210	3	200	6	⁵ —
Middleborough,	⁶ —	—	—	—	2	—
Milford,	2	160	2	120	4	⁵ —
Millbury,	1	80	1	60	2	150
Miller's River (Athol),	1	120	1	65	1	113
Nantucket,	2	205	2	150	5	⁷ 254
Natick,	4	435	3	420	9	⁸ 549
New Bedford,	7	700	8	1,060	21	⁹ 3,405
Newburyport,	2	200	2	180	7	340
Newton,	3	450	5	520	60	¹⁰ 1,024
North Adams,	¹¹ —	—	1	60	3	—
North Attleborough,	3	370	¹² 4	360	9	751
Northampton,	3	290	3	305	6	¹⁶ 805
North Shore (Revere),	4	465	4	515	8	¹³ 811
Orange,	2	120	2	110	2	367
Palmer,	1	125	1	100	2	333
People's (Easthampton),	¹⁴ —	—	—	—	1	—
Pittsfield Electric Light Co.,	¹⁴ —	—	—	—	4	—
Pittsfield Illuminating Co.,	3	210	3	180	3	748
Plymouth,	2	250	2	335	5	800
Quincy,	2	250	3	300	5	1,291
Salem,	4	500	2	860	14	2,563
Somerville,	4	700	4	470	10	1,517
Southbridge,	2	185	2	185	3	⁷ 248
South Hadley Falls,	—	¹¹ —	1	100	2	—
Spencer,	—	—	¹⁵ —	—	2	—
Stoughton,	1	60	1	50	1	187
Suburban (Boston),	3	450	1	650	8	⁵ —
Taunton,	2	180	2	125	7	600
Union (Franklin),	2	200	2	150	4	364
United (Springfield),	3	645	3	800	16	2,900
Waltham,	1	65	1	100	2	¹⁷ 49

¹ Also 163 tons screenings.² Also 503 tons coke breeze.³ Also water wheel, 60 H. P.⁴ Also 2 water wheels, 60 H. P. Used also 31 cords of wood.⁵ Not returned.⁶ 2 water wheels, 150 H. P.⁷ Works in operation only 8 months.⁸ Also 96 tons of sparks and screenings.⁹ Also 268 tons of coke and breeze.¹⁰ Also 14,778 bushels coke.¹¹ Steam bought.¹² Also water wheel, 30 H. P.¹³ Also 85 tons screenings.¹⁴ Power leased.¹⁵ 3 15-H. P. gas engines used; 1,202,990 feet of gas.¹⁶ Also 125 cords wood.¹⁷ Also 31,470 bushels of coke.

NAME OF COMPANY.	Number of Bollers.	Total rated Horse- power.	Number of Engines.	Total rated Horse- power.	Number of Dynamos.	Coal used. Tons.
Uxbridge & Northbridge, . . .	1	156	3	175	6	² 49
Walworth (Boston), . . .	2	150	2	85	3	800
Ware,	1	70	1	60	2	255
Webster,	2	230	2	140	3	300
Weymouth,	2	300	2	325	6	404
Westborough,	2	160	2	150	3	⁵ 133
Westfield,	2	130	2	140	4	³ 291
Whitman,	¹ —	—	—	—	2	—
Winchendon,	1	60	1	40	2	⁴ 17
Woburn,	4	500	5	475	11	660
Worcester,	8	1,000	7	540	18	2,832

¹ Power leased.² Also 31,470 bushels coke.³ Also 65 tons coke.⁴ Work in operation one month.⁵ Also 107 tons screenings.

The following table shows in feet the total length of wire; the length of underground conduit, the length of the wires in the same; the number of poles set in streets and ways, and the length of streets with overhead wires, of each company on June 30, last:—

NAME OF COMPANY.	Total Length of Wire. Feet.	Length of Wires in Conduit. Feet.	Length of Under- ground Conduit. Feet.	Number Poles set in Streets.	Length of Street with Overhead Wires. Feet.
Adams,	71,360	—	—	144	26,200
Andover,	60,736	—	—	443	20,000
Amherst,	22,550	—	—	50	7,000
Beverly,	49,200	—	—	176	21,648
Blue Hill (Canton), . .	121,440	—	—	573	—
Boston,	1,948,587	—	—	¹ 891	—
Bridgewater,	78,860	—	—	188	31,750
Brookline,	275,000	—	—	1,275	211,200
Cambridge,	850,000	—	—	1,000	147,840
Charlestown,	227,000	—	—	150	—
Chelsea,	178,500	—	—	1,421	170,000
Chicopee,	21,120	—	—	200	21,120
Clinton,	79,907	—	—	240	34,400
Cottage City,	26,400	—	—	60	21,120
Dedham,	157,300	—	—	1,080	132,000
Edison (Boston),	—	210,000	70,000	² 50	6,000
Edison (Brockton), . . .	463,537	21,000	7,000	1,600	179,800
Edison (Fall River), . . .	79,200	42,240	14,000	11	9,075
Edison (Lawrence), . . .	489,227	41,947	7,200	1,200	419,000
Edison (New Bedford), . .	222,876	24,000	8,000	240	59,872
E. L. and Patent Flooring (Amesbury),	190,060	—	—	230	52,800
Fall River,	166,320	—	—	364	55,440
Fitchburg,	222,200	—	—	410	66,050
Framingham,	361,800	—	—	700	95,000
Franklin (Turner's Falls), .	12,000	—	—	86	9,000
Gardner,	176,500	—	—	—	37,250
Gloucester,	60,000	—	—	125	20,000
Great Barrington,	77,543	—	—	277	40,840
Greenfield,	48,900	—	—	500	35,000
Haverhill,	182,000	—	—	400	132,000
Holyoke,	270,457	—	—	676	70,292
Hudson,	35,285	—	—	71	10,793
Hyde Park,	166,320	—	—	600	52,800
Lawrence,	118,800	—	—	119	27,720
Lee,	91,000	—	—	250	21,120
Leicester,	136,954	—	—	405	—
Leominster,	193,285	—	—	400	46,500
Lowell,	750,000	—	—	900	—
Lynn,	913,210	—	—	2,900	475,000
Malden,	1,372,000	—	—	4,500	660,000
Marlborough,	115,065	—	—	193	50,000
Middleborough,	36,680	—	—	174	18,480

¹ Roof structures, 972.² Roof structures, 20.

NAME OF COMPANY.	Total Length of Wire. Feet.	Length of Wires in Conduit. Feet.	Length of Under- ground Conduit. Feet.	Number of Poles set in Streets.	Length of Street with Overhead Wires. Feet.
Milford,	142,600	—	—	—	—
Millbury,	63,360	—	—	150	21,120
Miller's River (Athol),	30,000	—	—	160	30,000
Nantucket,	71,280	—	—	297	71,000
Natick,	171,460	—	—	450	47,520
New Bedford,	590,469	—	—	750	109,680
Newburyport,	79,200	—	—	375	79,000
Newton,	865,600	1,500	1,500	2,833	—
North Adams,	24,000	—	—	51	8,500
Northampton,	321,176	—	—	600	184,800
North Attleborough,	367,580	—	—	901	—
North Shore,	479,140	—	—	976	147,840
Orange,	63,564	—	—	215	26,000
Palmer,	68,809	—	—	165	31,680
People's (Easthampton),	37,000	—	—	225	28,000
Pittsfield Electric Light Co.	116,160	—	—	650	110,000
Pittsfield Illuminating Co,	69,029	—	—	130	—
Plymouth,	107,476	—	—	335	46,927
Quincy,	348,480	—	—	650	112,200
Salem,	410,900	—	—	750	200,000
Somerville,	950,650	—	—	2,500	—
Southbridge,	109,762	—	—	360	15,840
South Hadley Falls,	40,800	—	—	214	38,000
Spencer,	36,600	—	—	377	36,600
Stoughton,	76,560	—	—	300	76,560
Taunton,	158,400	—	—	300	—
Union (Franklin),	115,320	—	—	400	42,300
United (Springfield),	450,210	29,250	9,000	551	200,000
Uxbridge and Northbridge,	121,680	—	—	404	39,600
Waltham,	128,450	—	—	259	36,020
Walworth (Boston),	10,825	—	—	—	—
Ware,	22,000	—	—	185	22,000
Webster,	70,920	—	—	325	48,000
Westborough,	73,770	—	—	248	40,000
Westfield,	70,280	—	—	175	33,000
Weymouth,	587,012	—	—	—	—
Whitman,	116,160	—	—	720	95,040
Winchendon,	83,085	—	—	185	23,400
Woburn,	639,960	—	—	2,600	316,800
Worcester,	381,390	—	—	1,196	345,650

The following table shows the number of motors furnished off arc and incandescent circuits, the number of single and double arc lamps, and the number of plain and copper-coated carbons used during the year:—

NAME OF COMPANY.	Motors off Arc Circuits.	Motors off In- candescent Circuits.	Motors off Power Cir- cuits.	Horse-Power of Motors.	Number of Single Arc Lamps.	Number of Double Arc Lights.	Number of Plain Carbons Used.	Number of Copper- coated Carbons Used.
Adams,	-	-	-	-	-	30	13,000	-
Andover,	-	-	-	-	1	30	9,300	-
Beverly,	-	-	-	-	30	8	2,000	13,000
Blue Hill (Canton),	-	-	-	-	-	45	-	-
Boston,	80	-	-	108	960	1,452	-	1,552.653
Bridgewater,	-	-	-	-	25	4	-	4,259
Brookline,	1	2	-	21	42	136	120,000	-
Cambridge,	-	-	20	33	38	140	-	125,000
Charlestown,	1	-	-	1	24	102	-	125,000
Chelsea,	-	-	-	-	57	153	18,000	70,000
Clinton,	-	-	-	-	50	-	26,000	-
Cottage City,	-	-	-	-	52	-	5,000	-
Dedham,	-	-	-	-	7	19	-	-
Edison (Boston),	-	412	-	1,201	-	-	-	-
Edison (Brockton),	-	27	-	125	86	-	-	43,000
Edison (Fall River),	-	-	-	102	-	-	-	-
Edison (Lawrence),	-	36	-	73	35	15	10,500	-
Edison (New Bedford),	-	28	-	50	-	-	-	-
Electric Light & Patent Floor Co. (Ames- bury),	4	-	-	11½	65	2	12,000	-
Fall River,	-	-	-	-	164	102	82,000	76,000
Fitchburg,	-	-	-	-	57	104	65,000	-
Framingham,	-	-	-	-	21	68	-	32,000
Franklin (Turner's Falls),	-	-	-	-	27	-	2,000	6,000
Gardner,	-	-	-	-	48	20	-	-
Gloucester,	-	-	-	-	42	-	13,300	3,000
Great Barrington,	-	-	-	-	33	-	7,000	2,000
Greenfield,	-	1	-	1	45	1	13,000	-
Haverhill,	-	15	-	25	74	74	5,000	100,000
Holvoke,	-	-	-	-	330	25	121,000	-
Hudson,	-	-	-	-	21	4	5,000	4,000
Hyde Park,	-	-	-	-	22	106	38,700	-
Lawrence,	-	-	-	-	116	44	-	49,000
Leominster,	-	-	1	15	10	45	8,192	4,491
Lowell,	3	30	7	138	-	-	-	-
Lynn,	-	-	31	246	128	165	-	145,000
Malden,	-	-	-	-	195	10	-	-
Marlborough,	-	-	-	-	69	10	27,251	-
Milford,	-	5	-	-	80	-	10,000	15,000
Millbury,	-	-	-	-	22	-	-	11,000
Miller's River (Athol),	-	-	-	-	24	-	-	7,000
Nantucket,	-	-	-	-	31	-	2,880	2,000
Natick,	-	2	-	7	13	42	-	18,000
New Bedford,	-	-	27	103	285	112	500	101,257
Newburyport,	-	1	-	1½	140	2	-	20,720
Newton,	-	1	-	¼	-	82	40,000	1,000
North Adams,	-	-	-	-	55	-	-	-
Northampton,	-	-	-	-	114	-	25,000	-
North Attleborough,	10	-	-	24¾	117	1	5,000	13,000
North Shore,	-	-	10	135	135	4	15,082	6,000
Orange,	-	-	-	-	31	3	12,600	-
Palmer,	-	-	-	-	4	24	-	11,900
People's (Easthamp- ton),	-	-	-	-	35	-	-	-

NAME OF COMPANY.	Motors of Arc Circuits.	Motors of In- candescent Circuits.	Motors of Power Cir- cuits.	Horse- Power of Motors.	Number of Single Arc Lamps.	Number of Double Arc Lights.	Number of Plain Carbons Used.	Number of Copper- coated Carbons Used.
Pittsfield E. L. Co, . .	-	-	-	-	67	25	25,000	11,000
Plymouth,	-	-	12	173	31	3	9,832	2,000
Quincy,	-	-	-	-	-	88	30,000	-
Salem,	-	13	-	58½	113	204	2,000	173,295
Somerville,	1	1	-	6	3	217	1,000	120,000
Southbridge,	-	-	-	-	77	7	20,000	-
Spencer,	-	-	-	-	66	-	16,000	-
Stoughton,	-	-	-	-	70	-	16,000	-
Taunton,	-	-	-	-	150	65	-	70,000
Union (Franklin), . .	-	-	-	-	40	-	14,000	-
United (Springfield), .	-	-	20	47	138	356	19,640	174,489
Uxbridge & North- bridge,	-	-	-	-	45	-	-	-
Waltham,	-	-	-	-	107	1	22,750	16,150
Walworth (Boston), . .	-	5	-	7½	10	40	35,000	-
Ware,	-	-	-	-	39	-	5,000	5,000
Webster,	-	-	-	-	4	68	23,000	-
Westborough,	-	-	-	-	37	-	19,000	-
Westfield,	-	-	-	-	110	10	31,000	12 800
Weymouth,	-	-	-	-	-	44	8,228	4,928
Whitman,	-	-	-	-	42	-	8,620	-
Winchendon,	-	-	-	-	18	-	500	-
Woburn,	-	-	-	-	10	70	10,000	23,000
Worcester,	-	-	-	-	227	262	5,000	305,000

The following table shows the number of commercial lights of the different kinds, and the number of customers for each:—

NAME OF COMPANY.		Number of Commercial Arc Lights.	Nonflame Candle Power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Arc Circuits.	Nonflame Candle Power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Commercial Incandescent Arc Circuits.	Nonflame Candle Power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Consumers for both Arc and Incandescent Lights.
Adams, . . . . .	.	.	.	.	195	16	25	.	.	.	.
Andover, . . . . .	.	.	.	.	950	16	60	.	.	.	.
Amherst, . . . . .	.	.	.	.	876	16	79	.	.	.	.
Beverly, . . . . .	.	15	2,000	7	62	16	3	1	65	1	.
Blue Hill (Canton), . . . . .	.	.	.	.	300	16	.	.	.	.	.
	.	1,130	2,000	247	2,462	16	145	{ 79	16 }	45	44
	.	.	.	.	115	20	.	62	32 }	.	.
Boston, . . . . .	.	.	.	.	144	32	.	152	65 }	.	.
	.	.	.	.	84	125	.	.	.	.	.
	.	.	.	.	600	16	37	.	.	.	.
Bridgewater, . . . . .	.	.	.	.	770	16	17	.	65	2	1
Brookline, . . . . .	.	.	.	.	.	.	.	.	.	.	.
Cambridge, . . . . .	.	.	2,000	16	.	.	150	4	65	30	10
	.	.	2,000	30	2,000	20	.	80	32 }	.	.
	.	.	2,000	21	.	20	.	82	16 }	19	.
	.	.	.	.	.	.	.	141	32 }	.	.
	.	.	.	.	.	.	.	5	65 }	.	.
Charlestown, . . . . .	.	.	.	.	.	.	.	21	.	.	6
	.	.	.	.	.	.	.	.	.	.	2
Chelsea, . . . . .	.	50	1,200	21	1,200	16	41	.	.	.	.
Clinton, . . . . .	.	13	1,200	10	272	16	35	.	.	.	.
Cottage City, . . . . .	.	35	1,000	10	.	.	.	.	.	.	3
Dedham, . . . . .	.	8	1,200	.	572	16	36	.	.	.	.
Edison (Boston), . . . . .	.	.	.	.	28,790	16	1,700	.	.	.	.
Edison (Brookline), . . . . .	.	.	2,000	39	4,242	16	737	.	.	.	.
Edison (Fall River), . . . . .	.	.	.	.	6,400	16	342	.	.	.	.
Edison (Lawrence), . . . . .	.	.	2,000	27	3,750	16	255	.	.	.	3
Edison (New Bedford), . . . . .	.	.	.	.	7,869	16	500	.	.	.	.

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle Power.	Number of Consumers for commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle Power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Commercial Incandescent Lights off Arc Circuits.	Nominal Candle Power.	Number of Consumers for Commercial Incandescent Lights off Arc Circuits only.	Number of Consumers for both Arc and Incandescent Lights.
E. L. & Patent Floor Co. (Amesbury), . . .	11	1,200	2	500	20	-	1	32	1	5
Fall River,	16	2,000	32	-	-	-	-	-	-	-
Fitchburg,	51	1,200	17	339	16	56	-	-	-	5
	-	1,200	-	157	25	68	30	32	1	1
Framingham,	20	1,200	3	1,800	16	-	8	25	-	-
	-	-	-	-	-	-	9	65	-	-
Franklin (Turner's Falls),	5	2,000	5	230	16	-	4	20	2	-
Gardner,	25	1,200	12	2,011	16	98	2	65	-	-
	-	1,200	-	400	16	46	25	32	27	7
Gloucester,	27	1,200	3	-	-	-	50	65	3	-
Great Barrington,	4	1,500	3	836	16	71	5	50	2	5
Greenfield,	12	1,200	4	933	16	-	2	65	-	5
Haverhill,	74	1,200	20	650	20	225	5	65	-	6
Holyoke,	215	2,000	85	1,224	16	43	-	-	-	6
Hudson,	11	1,200	4	346	16	20	22	65	6	-
Hyde Park,	24	2,000	6	1,255	16	90	-	-	-	-
Lawrence,	125	2,000	54	-	-	-	-	-	-	-
Lee,	-	-	-	649	16	58	-	-	-	-
Leicester,	-	-	-	397	16	30	-	-	-	-
Leominster,	12	1,200	2	957	16	71	1	32	1	2
Lowell,	297	2,000	112	2,000	20	110	-	-	-	-
Lynn,	143	2,000	46	1,377	16	86	64	65	22	17
Nalden,	23	2,000	5	1,450	16	149	-	-	-	-
Norfolk,	52	1,200	11	616	16	65	2	25	2	9
Middleborough,	-	1,200	-	615	16	55	-	-	-	-
Milford,	21	1,200	6	700	16	70	-	-	-	-

Millbury,	1	400	16	50	7	25	3	6
Miller's River (Athol),	14	650	16	33	—	—	—	—
Nantucket,	13	1,400	16	97	—	—	—	—
Natick,	120	2,000	16	389	—	—	—	19
New Bedford,	185	5,134	16	—	—	—	—	—
Newburyport,	26	1	50	81	58	65	23	—
Newton,	—	43	32	—	6	32	—	—
North Adams,	39	400	20	110	—	—	—	—
Northampton,	22	1,276	16	69	10	16	3	—
North Attleborough,	168	325	16	—	5	65	—	—
North Shore (Revere),	—	1,000	16	95	—	20	87	—
Orange,	102	—	—	—	25	25	—	5
Palmer,	8	1,485	16	114	159	32	1	—
Pittsfield E. L. Co.,	40	687	16	80	115	50	2	—
Pittsfield Illuminating Co.,	—	545	16	53	82	65	6	—
Plymouth,	16	—	—	—	33	—	—	3
Quincy,	110	2,000	16	217	69	20	12	—
Salem,	98	900	16	42	10	64	—	—
Somerville,	—	2,200	16	134	36	32	14	—
Southbridge,	34	459	16	—	179	25	—	2
South Hadley Falls,	—	—	—	52	11	50	—	—
Spencer,	2	439	16	23	—	—	—	—
Taunton,	75	400	16	—	—	—	—	1
Union (Franklin),	3	350	16	30	—	—	—	—
United (Springfield),	141	1,200	16	65	6	16	9	23
Uxbridge & Northbridge,	—	4,499	16	174	2	65	—	—
	—	—	—	—	30	125	—	—
	—	840	16	48	—	—	—	—

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle Power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle Power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Commercial Incandescent off Arc Circuits.	Nominal Candle Power.	Number of Consumers for Commercial Incandescent off Arc Circuits only.	Number of Consumers for both Incandescent Lights and Incandescent off Arc Circuits.
Waltham,	{ 57	1,200	15	38	16 }	96	36	65	5	21
Walworth (Boston),	{ 50	1,200	21	818	20 }	35	1	65 }	3	-
Ware,	{	-	-	729	-	-	4	75 }	-	-
Webster,	{ 2	1,200	1	-	-	-	1	125 }	-	-
Westborough,	{ 20	1,200	7	350	16	39	-	-	1	1
Westfield,	{ 5	1,200	5	300	20	63	1	32	5	2
Westfield,	{ 35	1,200	5	1,050	16	70	11	25 }	-	-
Westfield,	{ 3	2,000	-	350	-	56	5	50 }	-	-
Weymouth,	{	1,200	-	-	16	90	-	-	-	-
Whitman,	{ 14	1,200	4	1,910	16	42	-	-	-	-
Winchendon,	{ 8	1,200	5	430	16 }	2	-	-	-	-
Woburn,	{ 37	2,000	-	6	20 }	-	-	-	-	-
Worcester,	{ 230	2,000	72	1,700	16 }	-	-	-	-	-
Worcester,	{	-	-	550	16 }	62	-	-	3	-
Worcester,	{	-	-	640	20 }	-	-	-	-	-

The following table shows the number of public lamps, their candle-power, the number of hours burnt per night, the number of nights per month, and the price paid : —

NAME OF COMPANY.	Number of Public Lamps.	Nominal Candle-power.	Number of hours per night.	Number of nights per month.	PRICE PAID.
Adams,	30	1,200	Dark to midnight, .	Every cloudy night,	\$82 50 per year.
Andover,	31	1,200	Dark to 12.30 A.M. .	25 nights, . . .	\$80 per year.
Beverly,	57	25	Dark to 12.30 A.M. .	25 nights, . . .	{ 51 cents per night; 32 lights furnished free
Blue Hill (Canton),	23	2,000	Sunset to midnight, .	Every night, . .	50 cents per night.
	45	2,000	Dark to midnight, .	18 nights, . . .	\$5 per month
	62	32	"	18 or 20 nights, .	{ \$16 per year. Taxes are agreed to amount to \$600.
	744	2,000	All night,	Every night, . .	40 cents per night.
Boston,	622	16	—	—	Average 10 cents each.
	42	20	—	—	
	14	32	—	—	
	2	45	—	—	
	73	65	—	—	
	4	125	—	—	\$70 per year. { Brookline 50 cents per night, one-year contract; Boston 40 cents, five-year contract.
Bridgewater,	30	2,000	Average 6 hours, .	25 nights, . . .	
Brookline,	178	2,000	All night,	Every night, . .	
		65	All night,	"	
		2,000	"	"	
Cambridge,	125	40	"	"	\$180 per year.
Charlestown,	83	2,000	"	"	\$30 per year.
Chelsea,	150	1,200	"	25 nights, . . .	40 cents per night.
	190	25	"	25 nights, . . .	30 cents per night.
					\$14 per year.

NAME OF COMPANY.	Number of Public Lamps.	Nominal Candle-power.	Number of hours per night.	Number of nights per month.	PRICE PAID.
Clinton,	38	1,200	Dark to midnight,	Every night, .	27 cents per night.
Cottage City,	17	1,600	5 hours, . . .	{ Every night during the season, } 90 days, .	47 cents per night.
Dedham,	{ 19 329 }	1,200 25	Dark to 12.30 A.M., Dark to 12.30 A.M.,	Every dark hour, Every dark hour,	{ Ten-year contract, 19 arcs and 314 incandescents for \$5,000 per year. Addi- tional lights, are \$70, in- candescent \$16 each per year.
Edison (Brockton),	{ 25 296 150 74 }	2,000 15 20 30	6½ hours, " " " "	Every night, . 24 nights, . " " " "	{ 41 cents per night, \$15 per night, \$18 per year, \$22 per year.
Edison (Lawrence),	{ 435 127 }	20 20	Dark to midnight, All night,	Every night, . " "	{ \$1.50 per month. \$3.04 per month.
E. L. & Pat Floor. Co. (Amesbury),	50	1,200	Every dark hour,	Every dark night, .	\$75 per year.
Fall River,	84	2,000	All night,	Every night, .	\$15 per month.
Fitchburg,	104	1,200	Average 5½ hours,	26 nights, .	\$7.50 per month.
Framingham,	59	1,200	Average 7 hours,	Average 25 nights, .	25 cents per night.
Franklin, Turner's Falls,	121	25	Average 7 hours,	" "	5 cents per night.
Gardner,	22	2,000	Sunset to 12.30 A.M.	Every night, .	\$85 per year.
Gloucester,	41	1,200	Dark to midnight,	Average 24 nights, .	\$75 per year.
Great Barrington,	29	25	Dark to midnight,	" "	\$15 per year.
	15	1,200	Av. 4 hours 39 min.	19 nights, .	\$80 per year.
	40	25	Av. 4 hours 39 min.	" "	\$17.50 per year.
	25	1,500	6 hours, . . .	25 nights, .	25 cents per night.
	16	50	6 hours, . . .	" "	6½ cents per night.

Greenfield,	.	.	.	.	.	1,200	Dark to midnight,	.	Moon schedule,	.	\$75 per year.
Haverhill,	.	.	.	.	.	32	Dark to midnight,	.	—	.	\$10 per year.
Holyoke,	.	.	.	.	.	2,000	All night,	.	25 to 28 nights,	.	47 cents per night.
Hudson,	.	.	.	.	.	2,000	All night,	.	Average 22 nights,	.	50 cents per night.
Hyde Park,	.	.	.	.	.	1,200	Dark to midnight,	.	Every night,	.	\$90 per year.
Lawrence,	.	.	.	.	.	2,000	6 hours,	.	25 nights,	.	\$70 per year.
Lee,	.	.	.	.	.	2,000	6 hours,	.	Every night,	.	33½ cents per night.
Leicester,	.	.	.	.	.	25	7 hours,	.	23 nights,	.	\$16 per year.
	.	.	.	.	.	25	Dark till midnight,	.	Every dark night,	.	\$20 per year.
Leominster,	.	.	.	.	.	1,200	Dark till midnight,	.		.	{ \$3,600 per year for 42 acres
	.	.	.	.	.	25	Dark till midnight,	.	"	.	and 24 incandescents. Ad-
	.	.	.	.	.			.		.	ditional lights, arcs \$80,
	.	.	.	.	.			.		.	incandescents \$18 each per
	.	.	.	.	.			.		.	year.
Lowell,	.	.	.	.	.	2,000	All night,	.	Every night,	.	50 cents per night.
Lynn,	.	.	.	.	.	2,000	All night,	.	Every night,	.	46 cents per night.
	.	.	.	.	.	25	All night,	.	28 nights,	.	\$20 per year.
Malden,	.	.	.	.	.	1,200	Average 6 hours,	.	Every night,	.	\$100 per year.
	.	.	.	.	.	1,200	"	.	Moon schedule,	.	\$90 per year.
	.	.	.	.	.	25	"	.	Moon schedule,	.	\$18 per year.
Marlborough,	.	.	.	.	.	2,000	Dark to midnight,	.	Every night,	.	\$100 per year.
	.	.	.	.	.	25	"	.	20 nights,	.	7 cents per night.
		"	.		.	
Milford,	.	.	.	.	.	1,200	{ 6 nights per week	.	Every night,	.	27½ cents per night.
	.	.	.	.	.		{ to 11 p.m., 1 night	.		.	
Millbury,	.	.	.	.	.	23	{ to midnight,	.	25 nights,	.	22 cents per night
Miller's River (Athol),	.	.	.	.	.	23	Dark to midnight,	.	Moon schedule,	.	\$75 per year.
	.	.	.	.	.	19	"	.	"	.	\$15 per year.
Nantucket,	.	.	.	.	.	17	Until midnight,	.	Every night,	.	\$100 per year.
	.	.	.	.	.		Average 7 hours,	.	Average 25 nights,	.	{ 30 at 30 cents per night. Ad-
Natick,	.	.	.	.	.	42	"	.	"	.	ditional at 25 cents.
	.	.	.	.	.	7	"	.	"	.	5½ cents per night.

NAME OF COMPANY.	Number of Public Lamps.	Nominal Candle-power.	Number of hours per night.	Number of nights per month.	PRICE PAID.
New Bedford,	{ 89	2,000	All night,	{ Moon schedule and dark nights as ordered,	40 cents per night.
Newburyport,	{ 68	16	-	{ Moon schedule,	³⁰ / ₁₀₀ cents per hour.
Newton,	{ 114	1,200	Average 6 hours,	{ Every dark night,	{ \$80 each per year for 100 lights.
North Adams,	{ 83	1,200	All night,	{ About 24 nights,	{ \$75 each for additional.
Northampton,	{ 31	25	Dark to 12 30 A.M.	{ " "	{ \$100 per year.
North Attleborough,	{ 13	1,200	Dark to midnight,	{ -	{ 13.50 per year.
North Shore (Revere),	{ 89	1,200	Dark to midnight,	{ 25 nights,	{ 46 per month.
Orange,	{ 118	1,200	Dark to 12 30 A.M.	{ Moon schedule,	{ 75 per year.
Palmer,	{ 16	1,200	Till midnight,	{ " "	{ 90 per year.
People's (Easthampton),	{ 106	25	"	{ " "	{ 80 per year.
Pittsfield E. L. Co.,	{ 26	1,200	Average 5 hours,	{ Average 26 nights,	{ 17 per year.
Plymouth,	{ 28	1,200	Dark to midnight,	{ Moon schedule,	{ 22 1/2 cents per night.
Quincy,	{ 33	1,800	5 1/2 hours,	{ 25 nights,	{ 22 1/2 cents per year.
Salen,	{ 45	1,200	Dark to 12 30 A.M.,	{ " "	{ 62 50 per year.
Somerville,	{ 160	25	Dark to 12 30 A.M.,	{ " "	{ 22 cents per year.
7 Somerville,	{ 18	1,200	6 hours,	{ " "	{ 4 1/2 cents per night.
Arlington,	{ 132	32	Average 7 hours,	{ Moon schedule,	{ 26 3/4 cents per night.
Belmont,	{ 88	1,200	All night,	{ Every night,	{ 6 1/2 cents per night.
9 Belmont,	{ 191	2,000	Sunset to 1 A.M.,	{ Every night,	{ 75 cents per year.
120 Belmont,	{ 140	2,000	"	{ 22 nights,	{ 45 cents per night.
	{ 275	25	"	{ " "	{ 3-year contract \$20,000 per year for all lights.
	{ 29	1,200	"	{ " "	{ All lights \$520 per month.
	{ 213	25	"	{ " "	{ All lights \$208.33 per month.
	{ 9	2,000	"	{ " "	
	{ 120	25	"	{ " "	

Southbridge,	50	1,200	Dark to midnight, .	23 nights, .	33 cents per night.
South Hadley Falls,	76	25	" " " " " "	" " " " " "	\$18.75 per year.
Spencer,	150	25	Sunset to midnight, .	About 27 nights, .	\$16 per year.
Stoughton,	66	1,200	Dark to midnight, .	20 nights, .	33½ cents per night.
Taunton,	70	800	7 hours,	21 nights, .	25 cents per night.
Union (Franklin),	71	1,200	Dark to 1 A.M., .	26 nights, .	34 cents per night.
United (Springfield),	37	1,200	Dark to midnight, .	Moon schedule, .	\$80 per year, 3 lights free.
Uxbridge and Northbridge,	40	25	" " " " " "	" " " " " "	\$10.50 per year.
Waltham,	360	1,200	All night,	Every night, .	22½ cents per night.
Ware,	45	2,000	" " " " " "	Moon schedule, .	\$70 per year.
Webster,	47	1,200	Sunset to 1 A.M., .	Every night, .	35 cents per night.
Westborough,	36	1,200	5 hours,	25 nights, .	25 cents per night.
Westfield,	54	1,200	Average 6 hours, .	Every night, .	\$90 per year.
Weymouth,	26	1,200	Until midnight, .	{ 20 nights ; more if }	\$80 per year.
Whitman,	26	32	" " " " " "	{ stormy, }	\$20 per year.
Winchendon,	49	2,000	6½ hours,	Every night, .	23 cents per night.
Woburn,	6	25	" " " " " "	" " " " " "	54 cents per night.
Worcester,	25	1,200	Dark to 12.30 A.M., .	Moon schedule, .	\$70 per year.
Woburn,	288	32	" " " " " "	" " " " " "	\$22 per year.
Woburn,	26	1,200	Till midnight, .	About 20 nights, .	33½ cents per night.
Woburn,	83	25	" " " " " "	" " " " " "	33½ cents per year.
Woburn,	10	1,200	Dark to midnight, .	Moon schedule, .	\$75 per year.
Woburn,	39	25	" " " " " "	" " " " " "	\$15 per year.
Woburn,	21	2,000	Dark to 12.30 A.M., .	20 nights, .	{ All lights \$25.00 per month.
Woburn,	96	25	" " " " " "	" " " " " "	{ All lights \$275 per month.
Woburn,	17	2,000	" " " " " "	" " " " " "	{ All lights \$541.66 per month.
Woburn,	118	25	" " " " " "	" " " " " "	{ 45 cents per night.
Woburn,	40	1,200	" " " " " "	22 nights, .	{ \$1.50 per month.
Woburn,	240	25	" " " " " "	" " " " " "	{ 45 cents per night.
Woburn,	195	2,000	All night,	Every night, .	{ \$1.50 per month.
Woburn,	12	65	" " " " " "	" " " " " "	{ 45 cents per night.

The following table shows the price charged by the several electric light companies for commercial lights on June 30, 1890 :—

NAME OF COMPANY.	Price for Commercial Lights.
Adams, . . .	For 16 c. p. incandescent lights for business places open every night, \$13.00 each per year; open 6 nights per week, \$12.00; open 5 nights per week and closing at 9 p.m., \$9.00; wiring and renewals free.
Andover, . . .	Incandescent lights average \$10.00 per year. Commercial wiring and renewals free. Domestic wiring, \$2.50 to \$5.00 per light; renewals 75 cents each.
Amherst, . . .	Incandescent lights, one cent per hour, 16 c. p. lamps by meter; wiring at cost; renewals free.
Beverly, . . .	Arc lights, 50 cents per night. Incandescent lights, 16 c. p.; 6 nights per week, \$1.00 each per month; 4 nights per week, 87½ cents each per month. Customers furnish renewals.
Blue Hill (Canton), .	Incandescent lights, one cent per ampere hour. Wiring at cost; renewals free.
Boston, . . .	Arc lights under contracts, 1 lamp for 12 mos., 75 cents; for 6 mos., 80 cents; for 3 mos., 90 cents; 2 lamps for 12 mos., each 70 cents; for 6 mos., each 75 cents; for 3 mos., each 85 cents per day; 3 or 4 lamps for 12 mos., each 65 cents; for 6 mos., each 70 cents; for 3 mos., each 80 cents per day; 5 to 7 lamps for 12 mos., each 60 cents; for 6 mos., each 65 cents; for 3 mos., each 75 cents per day; 8 or 9 lamps for 12 mos., each, 55 cents; for 6 mos., each 60 cents; for 3 mos., each 70 cents per day; 10 lamps for 12 mos., each 50 cents; for 6 mos., each 55 cents; for 3 mos., each 65 cents per day. Incandescent lights under contracts, 125 c. p. for 12 mos., each lamp 50 cents per day; 65 c. p. for 12 mos., each lamp, 30 cents per day; 32 c. p. for 12 mos., each lamp 20 cents per day; 16 c. p., special rates, varying from 11-5 to 3 cents per hour, based on average hours burned per day. Inside incandescent wiring charged to* customer at cost; lamps furnished and renewed free.
Bridgewater, . . .	Arc lights, \$100.00 per year of 300 nights. Incandescent lights, 1 cent per ampere hour or \$10.00 per year for 16 c. p. lamp; wiring, \$2.00 per lamp, open wiring; \$2.75 per lamp for concealed work. Lamp renewals free.
Brookline, . . .	Arc lights, \$65.00 to \$100.00 per year according to hours burnt. Incandescent lights, \$1.00 to \$1.50 per mo., 16 c. p. lamps.
Cambridge, . . .	Arc lights, 6 days per week to 10 p.m., \$100.00 per year per lamp; 7 days per week, \$120.00 per year; 6 days per week to 12 p.m., \$120.00 per year; 7 days per week, \$140.00 per year. Incandescent lights, 20 c. p., yearly contract, 1 lamp \$10.00, 5 lamps \$9.50, 10 lamps \$9.00, 15 lamps \$8.50, 20 lamps \$8.00 each per annum; 32 c. p., \$24.00 to \$30.00 per year; 65 c. p., \$40.00 to \$48.00 per year. Consumers pay cost of wiring, lamps and renewals.
Charlestown, . . .	Arc lights, 50 cents per night. Incandescent lights, 50 cents per night per group of 8, 16 c. p. lamps. Wiring and lamp renewals at company's expense.
Chelsea, . . .	Arc lights, 40 cents per lamp per night until 12 p.m., 30 cents per night per lamp until 6 p.m. Incandescent lights, 16 c. p., \$1.25 per mo. for stores. Houses by meter 1½ cents per hour. Renewals, 75 cents each.
Clinton, . . .	Arc lights, 1 light, \$8.33 per mo.; 2 lights, \$7.50 each per mo.; 3 lights, \$7.00 each per mo.; 4 or more lights, \$6.50 each. Incandescent lights, \$1.00 per light per month. Wiring and renewals free.

NAME OF COMPANY.	Price for Commercial Lights.
Cottage City, . . .	Arc lights, \$50.00 per season of 85 to 90 days.
Dedham, . . .	Arc lights, \$70.00 per year. Incandescent lights on leases, \$10.00 per year until 10 P.M.; by meter, 30 cents per 1,000 watt hours. Residences 20 cents per 1,000 watt hours. Wiring at cost; renewals, commercial, free, residences, 75 cents each for 16 c. p. lamps.
Edison (Boston), . .	Incandescent lights, 1 cent per hour 16 c. p. lamp. Lamp renewals free; inside wiring charged to customer.
Edison (Brockton), .	Arc lights, 4 nights per week, each lamp \$9.00 per mo.; 7 nights, \$10.00 per mo. Incandescent lights, \$0.0172 per 16 c. p. lamp hour. Discounts to large consumers. Lamp renewals free.
Edison (Fall River),	Incandescent lights, 1½ cents per 16 c. p. lamp hour by meter. Inside wiring at net cost; renewals free.
Edison (Lawrence), .	Arc lights, every night till midnight, \$10.00 per mo.; 6 nights per week, \$8.00 per mo.; 3 nights per week, \$7.00 per mo. Incandescent lights, 1½ cents per 16 c. p. lamp hour by meter. Renewals free.
Edison (New Bedford), . . .	Incandescent lights, 1½ cents per 16 c. p. lamp hour. Inside wiring at cost. Renewals free.
Electric Light (Amesbury), . . .	Arc lights, 3 nights per week, each lamp \$57.00; 4 nights, \$63.00; 5 nights, \$69.00; 6 nights, \$75.00; 7 nights, \$81.00 per year. Incandescent lights, 16 c. p. lamps, 3 nights per week, \$8.00 per year, and \$1.00 per year additional for each additional night per week; 20 c. p. lamps, 3 nights per week, \$9.00 per year, and \$1.00 per year additional for each additional night per week; 32 c. p. lamps, 3 nights per week, \$16.00 per year, and \$2.00 per year additional for each additional night per week. Wiring for stores free, for houses at owner's expense. All lamp renewals at consumers' expense.
Fall River, . . .	Arc lights, \$8.00 per mo.
Fitchburg, . . .	Arc lights, 1 light, \$10.00 to \$13.00 per mo.; 2 to 4 lights, \$10.00 to \$12.00 per mo.; 5 to 9 lights, \$9.00 to \$11.00 per mo.; 10 or more lights, \$8.00 to \$10.00 per mo. Incandescent lights, 16 c. p. lamps, \$1.00 to \$1.25 each per mo.; 25 c. p. lamps, \$1.50 to \$1.80 each per mo., by meter 1½ cents per ampere hour. Inside wiring and lamp renewals at cost.
Framingham, . . .	Arc lights, \$72.00 per year. Incandescent lights by meter, 1½ cents per lamp hour. By contract, \$1.25 each per month for first 3 lights; additional lights, \$1.00 each per month up to 10; 10 lights, \$12.00 per month. Larger numbers by contract wiring in stores, \$1.50 per lamp; in houses free. Renewals free.
Franklin (Turner's Falls), . . .	Arc lights, \$75.00 per year. Incandescent lights, 4 nights in the week to 9 P.M., \$7.00 per year; 6 nights in the week to 11 P.M., \$10.00.
Gardner, . . .	Arc lights, 6 nights per week, \$83.25 per year; 5 nights, \$72.15; 4 nights, \$61.05. For 2 lights 8 per cent. off above, for 3 or more 16 per cent. off. Incandescent lights houses, stores, barns, churches and halls, \$0.0122 per lamp hour. Shops, mills and factories, \$0.0225 per lamp hour. Discount of 10 per cent. for payment on or before the 10th of the month. Wiring at cost; lamp renewals free.
Gloucester, . . .	Arc lights, \$8.00 to \$9.00 per mo. Incandescent lights, 65 c. p., \$3.00 to \$4.00 per mo. per lamp; 32 c. p., \$2.00 to \$2.50 per lamp per mo.; 16 c. p. \$1.00 to \$1.25 per lamp per month. Wiring at cost; renewals free.
Great Barrington, . .	Arc lights, 25 cents per night. Incandescent lights, 16 c. p., \$10.00 per lamp per year. Renewals free.

NAME OF COMPANY.	Price for Commercial Lights.
Greenfield, . . .	Arc lights, \$100.00 per lamp per year. Incandescent lights, \$6.00 to \$20.00 per lamp per year. Wiring and lamp renewals at customers' expense.
Haverhill, . . .	Arc lights, \$6.25 per month per light 2 nights per week, \$9.00 for 3 nights, \$13.00 for 6 nights. Incandescent lights, \$1.00 per month per light 3 nights per week, \$1.25; 6 nights, \$1.75 per month per light all day and night. Wiring and renewals free.
Holyoke, . . .	Arc lights, \$100.00 each per year; 6 nights per week, \$75.00; 4 nights, \$70.00; 3 nights, incandescent lights, \$6.00 to \$12.00 each per year, according to time used. Renewals, 75 cents each 16 c. p. lamp.
Hudson, . . .	Arc lights, \$6.25 per mo. Incandescent lights, 50 cents to \$1.00 per mo. Wiring and renewals free.
Hyde Park, . . .	Arc lights, \$70.00 per year. Incandescent lights, \$10.00 per year until 10 p.m.; 1½ cents per hour for 16 c. p. lamps by meter. Stores and halls wired free. Residences at cost; lamps and renewals at customers' expense.
Lawrence, . . .	Arc lights, 3 nights per week, \$6.00 per lamp per mo.; 6 nights, \$8.00; 7 nights, \$10.00.
Lee, . . .	Incandescent lights, \$9.00 per year by contract. One cent per hour 16 c. p. lamps by meter. Renewals, 75 cents each.
Leicester, . . .	Incandescent lights, \$10.00 per lamp per year; 5 per cent. discount for all lamps when number is 5 or more. In houses for hall light, \$7.50 per year; balance of house graduated to this. Wiring and renewals at cost.
Leominster, . . .	Arc lights, \$80.00 per year. Incandescent lights until 10 o'clock, \$10.00 per year; until 12 o'clock, \$12.00 per year. House lighting schedule based on hall lamp at \$7.50 per year. Wiring at cost; lamp renewals, 80 cents each.
Lowell, . . .	Arc lights, 50 cents per lamp per night until midnight. Incandescent lights, \$1.00 per lamp per mo.
Lynn, . . .	Arc lights, \$7.50 to \$12.50 per lamp per mo. Incandescent lamps, \$1.00 to \$1.25 per lamp per mo. by meter 1½ cents per lamp hour. Renewals free. Wiring at cost.
Malden, . . .	Arc lights, \$10.00 per mo. Incandescent lights, \$1.00 per mo. for 16 c. p. lamps. Wiring and renewals free when contract is made, when light is furnished by meter wiring and renewals at customers' expense.
Marlborough, . . .	Arc lights, every night, 1 light, \$8.50 per mo.; 2 or more lights, \$7.50 each; 3 nights per week, 1 light, \$7.50 per mo.; 2 or more lights, \$5.00 each. Incandescent lights, 16 c. p., 3 or 4 nights per week, \$10.00 per year; 6 nights until 9 p.m., \$12.00; until 2 p.m., \$13.50. Wiring and renewals free.
Middleborough, . . .	Arc lights average \$60.00 per year. Incandescent lights average \$9.00 per year. Wiring and renewals free.
Milford, . . .	Arc lights, outside, April to October, \$6.67 per lamp per mo.; October to April, \$10.00 per lamp per mo. Inside use, April to October, 1 lamp 6 or 7 nights per week, \$8.00 per mo.; 2 lamps 6 or 7 nights per week, \$14.50 per mo.; 3 lamps 6 or 7 nights per week, \$20.50 per mo.; 4 lamps 6 or 7 nights per week, \$25.50 per mo. For 4 nights per week, 1 lamp, \$6.00; 2 lamps, \$10.75; 3 lamps, \$16.00; 4 lamps, \$20.00. For 3 nights per week, 1 lamp, \$5.50; 2 lamps, \$10.00; 3 lamps, \$15.00; 4 lamps, \$18.00. From October to April, 6 or 7 nights per week, 1 lamp, \$12.00; 2 lamps, \$21.50; 3 lamps, \$30.50; 4 lamps, \$38.50. 4 nights per week, 1 lamp, \$9.75; 2 lamps, \$17.00; 3 lamps, \$24.00; 4 lamps, \$31.00. 3 nights per week, 1 lamp, \$9.50; 2 lamps, \$15.00; 3 lamps, \$22.50; 4 lamps,

NAME OF COMPANY.	Price for Commercial Lights.
Milford,	<p>\$28.00. Transient lights, 75 cents per night per light. Incandescent lights by meter $1\frac{1}{4}$ cents per lamp hour, on contract, 16 c. p. lamps burning all night, \$2.50 per lamp per month, until 11 P.M. \$1.25, until 9 P.M., \$1.00. If burnt 4 evenings per week, \$1.00 per month; 3 evenings, 90 cents. Wiring at cost; renewals free. Factory lighting, from 4 to 6 P.M., 50 cents per lamp per month.</p>
Millbury,	<p>Incandescent lights, 50 cents per candle per year. Wiring free; renewals, 20 c. p. lamps, 55 cents each.</p>
Miller's River (Athol),	<p>Arc lights, \$75.00 per year.</p>
Nantucket,	<p>Arc lights, \$8.35 and \$10.00 per month. Incandescent lamps, 16 c. p., \$10.00 each per year.</p>
Natick,	<p>Arc lights, \$72.00 per year. Incandescent lights, \$1.00 each per month for first four; additional lamps, 50 cents each. Wiring and renewals free.</p>
New Bedford,	<p>Arc lights, 50 cents per night for single light. Incandescent lights, until midnight, \$11.00 per lamp per year. Interior construction about \$1.50 per lamp. Renewals free.</p>
Newburyport. . . .	<p>Arc lights, 4 to 7 nights per week, 1 light, \$10.00 per mo.; 2 lights, \$9.00 each; 3 or more, \$8.00 each; 1 to 3 nights per week, 1 light, \$7.00 per mo.; 2 lights, \$6.25 each; 3 or more, \$5.67 each. Series incandescent lights, 65 c. p., 4 to 7 nights per week, 1 light, \$5.00 per mo.; 2 lights, \$4.75 each; 3 lights, \$4.50 each; 4 lights, \$4.25 each; 5 or more, \$4.00 each. 1 to 3 nights per week, 1 light, \$3.50 per mo.; 2 lights, \$3.37 each; 3 lights, \$3.25 each; 4 lights, \3.12\frac{1}{2}$ each; 5 lights, \$3.00 each; 6 or more, \$2.83$\frac{1}{2}$ each. Direct current incandescent, 20 c. p. lamp, 4 to 7 nights per week, \$1.25 each per mo.; 1 to 3 nights per week, \$1.00; 32 c. p. lamp, 4 to 7 nights, \$2.00 each per mo.; 1 to 3 nights per week, \$1.60. Discount of 5 per cent. on all bills paid within 10 days. Wiring free. Renewals at customers' expense.</p>
Newton.	<p>Incandescent lights, 1 cent per hour for 16 c. p. lamp.</p>
North Adams,	<p>Arc lights, single lamp, 40 cents per night; 2 lamps, 36 cents each; 3 at 34 cents each; 4 at 33 cents each; 5 at 32 cents each. Incandescent lights, \$1.00 per mo. for 6 nights per week; 82$\frac{1}{2}$ cents per mo. for 4 nights per week.</p>
Northampton,	<p>Arc lights, \$75.00 per year every night till 10 P.M.; \$100.00 till midnight; \$60.00 for one night a week till 10 P.M. Incandescent lamps, 16 c. p., used 2 nights per week until 10 P.M. and 4 nights until 6 P.M., \$8.00 each per year; 6 nights until 9 P.M., \$10.00; until 10 P.M., \$12.00; until 11 P.M., \$14.00; until midnight, \$16.00; 7 nights until 10 P.M., \$13.00; until 11 P.M., \$15.00; until midnight, \$17.00; all night, \$20.00. By meter, 1 cent a lamp hour. Wiring and lamps on meter at consumers' cost; other lamp renewals free.</p>
North Attleborough,	<p>Arc lights, \$8.00 per lamp per mo., or 40 cents per night. Incandescent 20 c. p. lamps, \$1.25 each per mo.; 32 c. p., \$2.00 each per mo.; 65 c. p., \$4.00 per mo. Interior construction and renewals free.</p>
North Shore (Revere),	<p>Arc lights, \$80.00 per year. Summer rates, 55 cents per night per light. Incandescent lights, \$12.00 per year until midnight; \$10.00 until 10 P.M.; $1\frac{1}{4}$ cents per lamp hour by meter. Commercial wiring and renewals free. Domestic wiring at cost; renewals, 80 cents each, with rebate of 5 cents for old lamps.</p>
Orange.	<p>Arc lights, \$50.00 per year, 4 nights a week. Incandescent lights, 16 c. p., 4 nights a week, \$9.00 a year; 6 or 7 nights a week, \$10.00 a year. Wiring: stores free, dwellings at cost. Renewals free if lamps burn out in less than 600 hours.</p>

NAME OF COMPANY.	Price for Commercial Lights.
Palmer,	Arc lights, \$80.00 per year. Incandescent lights, on basis of \$10.00 per year till 10 P.M. Stores, wiring and renewals free; houses, wiring and renewals at cost.
Pittsfield E. L. Co., .	Arc lights, \$84.00 per year. Incandescent lights, 20 c. p. lamps, \$1.00 per mo. each; 65 c. p. lamps, \$3.00 per mo. each. Interior construction and renewals free.
Pittsfield Illu. Co., .	Incandescent lights, 1 cent per ampere hour. First outfit of lamps free; 600 hours guaranteed life. Wiring and renewals paid by customer.
Plymouth,	Arc lights, 30 cents per lamp per night. Incandescent lights, \$10.00 each per year until 10 P.M.; by meter, 1½ cents per lamp hour. Commercial wiring free, domestic at cost. All renewals free.
Quincy,	Incandescent lights, \$1.00 per mo., 16 c. p. lamp. Original outfit of lamps free. Store wiring and renewals furnished by company; house wiring and renewals by consumers.
Salem,	Arc lights, every evening except Sunday, \$12.00 per month; 3 nights a week, \$10.00. Incandescent lights, 16 c. p., 6 evenings a week until 10.30 P.M., \$1.00 and renewals; 7 evenings, \$1.16; 3 evenings, 87 cents; 1 evening, 75 cents per month. Special rates in many cases. Renewals, 75 cents each. Original installation of lamps free.
Somerville,	Arc lights, \$100.00 per year, usually. Incandescent lights, rate based on price of 1 cent per hour, 16 c. p. lamps. Renewals according to contract.
Southbridge,	Arc lights, single lamp, \$80.00 per year for drug stores, \$70.00 elsewhere; 2 lamps, 10 per cent. discount; 3, 15 per cent. discount; more than 3 special rates. Incandescent lights, \$10.00 per year for one 16 c. p. lamp, \$50.00 for six. Wiring, commercial free. Domestic by contract. All renewals free.
South Hadley Falls,	Incandescent lights, 6 nights per week till 6.30 P.M., \$6.00 per year; till 6.30 P.M. ordinarily and till 10 P.M. 2 nights per week, \$7.20; till 6.30 P.M. ordinarily and till 10 P.M. 3 nights per week, \$7.80; till 6.30 P.M. ordinarily and till 10 P.M. 4 nights per week, \$8.40; till 9 P.M. 6 nights per week, \$8.40; till 10 P.M. 6 nights per week, \$10.00; till 11 P.M. 6 nights, \$11.00. Prices for 16 c. p. lamps. Discount of 5 per cent. on bills paid within 5 days. Wiring and lamp renewals at cost.
Spencer,	Arc lights, 33½ cents per night.
Stoughton,	Arc lights, \$60.00 per year.
Suburban (Boston), .	Arc lights, one 50 cents per night; more than one, 45 cents each. Incandescent lights, 1 1-10 cents per ampere hour, with discount of 10 per cent. if paid before the 10th of the month. Renewals free.
Taunton,	Arc lights, \$8.00 per mo. Incandescent lights, \$1.00 per mo.
Union (Franklin), .	Incandescent lights, by meter, 1 cent an hour, 16 c. p. lamp; wiring at cost. Renewals free.
United (Springfield),	Arc lights, 35 cents to 70 cents per lamp per night. Incandescent lights. Rates per lamp per year for domestic lighting: 1st lamp, \$9.00; 2d, \$8.00; 3d, \$7.00; 4th, \$6.00; 5th, \$5.00; 6th, \$4.00; 7th and all others, \$3.00. Rates per lamp per year for business lighting until 6 P.M. ordinarily and 10 P.M. 1 night per week: 10 c. p. lamps, \$5.50 each; 16 c. p., \$7.00; 25 c. p., \$9.25; 50 c. p., \$17.50; 100 c. p., \$33.50; 150 c. p., \$49.00. Until 6 P.M. ordinarily and 10 P.M. 2 nights per week: 10 c. p. lamps, \$6.50 each; 16 c. p., \$8.00; 25 c. p., \$10.75; 50 c. p., \$20.00; 100 c. p., \$38.50; 150 c. p., \$56.00. Until 6 P.M. ordinarily and 10 P.M. 3 nights per week: 10 c. p.

NAME OF COMPANY.	Price by Commercial Light.
United (Springfield).	lamps, \$7.50 each; 16 c. p., \$9.00; 25 c. p., \$12.00; 50 c. p., \$22.50; 100 c. p., \$43.25; 150 c. p., \$60.00. Until 8 p.m. ordinarily and 12 p.m. 1 night per week: 10 c. p. lamps, \$8.00 each; 16 c. p., \$10.00; 25 c. p., \$13.25; 50 c. p., \$25.00; 100 c. p., \$48.00; 150 c. p., \$70.00. Until 10 p.m. every night: 10 c. p. lamps, \$9.00 each; 16 c. p., \$11.00; 25 c. p., \$14.75; 50 c. p., \$27.50; 100 c. p., \$52.75; 150 c. p., \$77.00. Until 12 p.m. every night: 10 c. p. lamps, \$10.00 each; 16 c. p., \$12.00; 25 c. p., \$16.00; 50 c. p., \$30.00; 100 c. p., \$57.50; 150 c. p., \$84.00. All night and every night: 10 c. p. lamps, \$13.00 each; 16 c. p., \$16.00; 25 c. p., \$21.25; 50 c. p., \$40.00; 100 c. p., \$76.75; 150 c. p., \$112.00. Lamps and renewals free. Interior wiring at cost.
Uxbridge and North- bridge.	Incandescent lights, 1 cent per hour, 16 c. p. lamps by meter, \$10.00 per year by contract.
Waltham.	Arc lights, 6 or 7 nights per week till 12 p.m., 1 light, \$12.50 per mo.; 2 lights, \$11.87; 3 lights, \$11.25; 4 lights, \$10.62; 5 lights, \$10.00; 4 or 5 nights per week, 1 light, \$10.00; 2 lights, \$9.50; 3 lights, \$9.00; 4 lights, \$8.50; 5 lights, \$8.00 each. Discount 20 per cent. from above prices if paid on or before the 15th of the month. Incandescent lights, 20 c. p., 6 or 7 nights per week, \$1.35 per mo.; 5 nights per week, \$1.30 each; 4 nights per week, \$1.25 each. Discount 25 cents per light if paid on or before the 15th of the month. 32 c. p., 6 or 7 nights per week, 1 light, \$2.75; 2 lights, \$2.62; 3 lights, \$2.49; 4 lights, \$2.34; 5 lights, \$2.20; 4 or 5 nights per week, 1 light, \$2.50; 2 lights, \$2.38; 3 lights, \$2.25; 4 lights, \$2.12; 5 lights, \$2.00 each; 65 c. p., 6 or 7 nights per week, 1 light, \$3.00; 2 lights, \$2.75; 3 lights, \$2.50; 4 lights, \$2.25; 5 lights, \$2.00; 4 or 5 nights per week, 1 light, \$4.50; 2 lights, \$4.28; 3 lights, \$4.05; 4 lights, \$3.82; 5 lights, \$3.60 each. Discount 10 per cent. from these prices if paid on or before the 15th of the month. Inside wiring and lamp renewals at expense of consumer.
Walworth (Boston).	Arc lights, 50 cents per day. Incandescent lights, 1 cent per hour, or \$20.00 per year. Lamp renewals free.
Ware.	Arc lights, \$60.00 per year until 10 p.m. Incandescent lights, 16 c. p. until 10 p.m., \$10.00 per year; until 12, \$12.00. Wiring and renewals free.
Webster.	Arc lights, \$80.00 per lamp per year. Incandescent lights, \$10.00 per lamp per year. Interior wiring at cost. Lamp renewals free.
Westborough.	Arc lights, \$80.00 per year. Incandescent lights, \$7.50 per year for 16 c. p. lamp; \$9.00 for 20 c. p. lamp. Wiring at cost; first lamp free; renewals at expense of customer.
Westfield.	Arc lights, \$100.00 per year payable monthly. A discount of 5 per cent. is made for each week-day night on which the lamp is not burned after 6 p.m. Incandescent lights, for 1 10 c. p. lamp every night until 11 p.m., \$1.25 per mo.; every night except Sunday until 11 p.m., \$1.25 per mo.; 3 nights until 9 p.m.; 1 night until 10 p.m., \$1.00 per mo.; 4 nights until 8 p.m., 2 nights until 11 p.m., 50 cents per mo.; 3 nights until 6 p.m., 2 nights until 9 p.m., 1 night until 10 p.m., 70 cents per mo.; 10 c. p. lamps, 25 per cent. less than above rates; 20 c. p. lamps, 20 per cent. more than above rates. Wiring free; lamps and renewals at consumers' expense.
Weymouth.	Incandescent lights, 16 c. p. lamps, 7 nights per week, \$14.00 per year; 6 nights, \$9.00; 5 nights, \$8.00; 4 nights, \$6.00. Wiring at cost; renewals, 16 c. p. lamps, 75 cents each.

NAME OF COMPANY.	Price for Commercial Lights.
Whitman, . . .	Arc lights, 4 nights per week until 10 P.M., \$60.00 per year; until midnight, \$75.00. 6 nights per week until 10 P.M., \$75.00; until midnight, \$90.00. Incandescent lights, 16 c. p., until 10 P.M., \$10.00 per lamp per year; until midnight, \$12.00; until day-light, \$18.00; 20 c. p. lamps until 10 P.M., \$12.00; until midnight, \$15.00; until day-light, \$21.00. Wiring at cost; renewals at customers' expense.
Winchendon, . . .	Arc lights, 4 nights per week until 10 P.M., \$60.00 per year; until midnight, \$75.00; 6 nights per week until 10 P.M., \$75.00; until midnight, \$90.00. Incandescent lights, 16 c. p., until 10 P.M., \$10.00 per lamp per year; until midnight, \$12.00; until daylight, \$18.00. 20 c. p. lamps until 10 P.M., \$12.00; until midnight, \$15.00; until day-light, \$21.00. By meter for residences, 20 cents per 1000 watt hours, in other cases 30 cents per 1000 watt hours. Meter rental, 25 light meter, \$2.00 per year; 50 light, \$2.50; 100 light, \$4.00. Wiring at cost. Lamp renewals, 75 cents each.
Woburn, . . .	Arc lights, \$9.00 per month. Incandescent lights by contract, \$1.00 per month; 16 c. p. lamps by meter, 20 cents per 1000 watt hours. Wiring by contract; renewals free.
Worcester, . . .	Arc lights, 1 light for 4 mos. daily, 70 cents; for 8 mos. daily, and Saturdays for 12 mos., 60 cents per night; 2 lights for 4 mos. daily, 65 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 55 cents each per night; 3 lights for 4 mos. daily, 60 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 50 cents each per night. One or more lights every night in the year, 50 cents each. Incandescent lights, \$1.50 each per mo. Lamp renewals free.

CASES PENDING BEFORE THE BOARD DEC. 31, 1890.

Appeal of the Lawrence Gas Company from the decision of the selectmen of Methuen, giving certain persons the right to lay gas pipes in the streets.

Appeal of the same from the decision of the selectmen of North Andover, giving the Merrimack Valley Horse Railroad Company the right to erect poles and maintain electric lights in the streets.

Appeal of the Braintree Electric Company from the consent of the selectmen of Braintree, allowing A. S. Morrison & Brothers and others to run wires over certain streets.

Appeal of the Boston Electric Light Company and the Edison Electric Illuminating Company from the decision of the aldermen of Boston, allowing certain parties to run wires over Summer Street.

Appeal of the Methuen Gas Light Company from the decision of the selectmen of Methuen, refusing it permission to erect poles and wires in the streets.

Appeal of the Marlborough Gas Light Company from the decision of the selectmen of Marlborough, giving the Citizens' Gas Company permission to lay gas pipes in the streets.

Petition of the mayor of Chelsea and consumers against the Chelsea Gas Light Company, for a reduction in the price of gas and electric light, and a supply of electric light at all hours.

Petition of the Lawrence Gas Company for authority to furnish electric light in Methuen.

Appeal of the Randolph and Holbrook Electric Company and Edward H. Galligan and others from the decision of the selectmen of Randolph, permitting the Randolph and Holbrook Light and Power Company to erect poles in the streets.

Appeal of the Bristol County Electric Company from the decision of the aldermen of Taunton, refusing it permission to erect poles and wires in the streets.

Appeal of P. H. Alexander *et al.* from the decision of the selectmen of Peabody, refusing permission to maintain poles and wires in the streets.

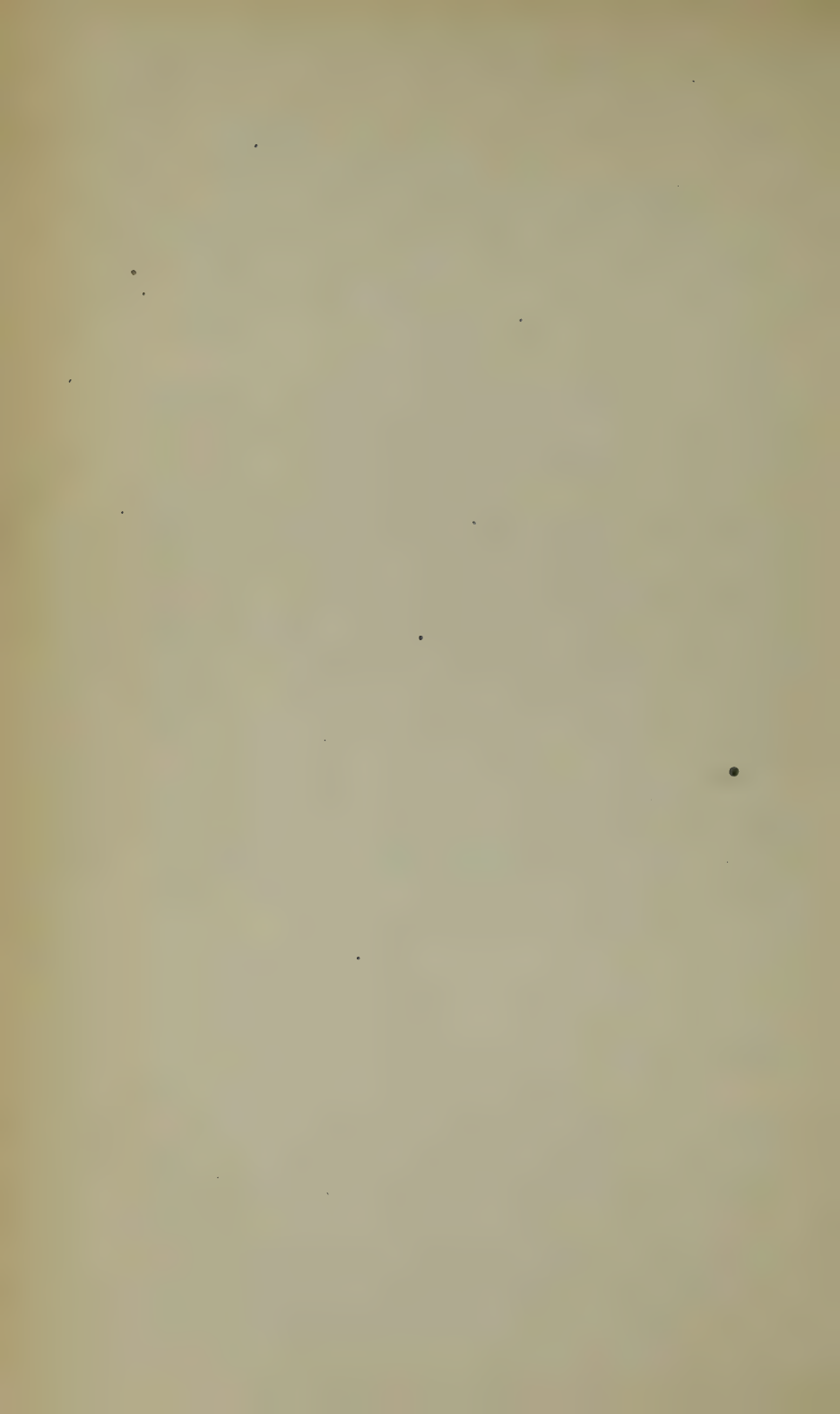
Petition of the Easthampton Gas Company for authority to supply electric light.

Petition of the Natick Gas Light Company for authority to supply electric light.

Appeal of the Wakefield Electric Light and Power Company from the decision of the selectmen of Wakefield, refusing permission to maintain poles and wires in the streets.

ABRAHAM B. COFFIN.
FORREST E. BARKER.
CHARLES A. TOWNE.

Boston, Jan. 7, 1891.



APPENDICES.

APPENDIX A.

BALANCE SHEETS AND PROFIT AND LOSS ACCOUNTS, JUNE 30, 1891.

[From the returns made as corrected by the Board.]

ADAMS ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$3,558 13
Steam plant,	11,689 61
Electric plant,	6,779 71
Lines, meters, lamps and globes,	7,022 69
Incandescent installations,	672 57
Due for electric light and power,	822 45
Fuel on hand,	67 60
Carbons on hand,	10 60
Oil and waste on hand,	44 75
Incandescent lamps on hand,	38 50
Other electric materials on hand,	500 00
Cash on hand,	11 96

Total assets, as per books of the company,	\$31,218 57
Profit and loss balance,	1,396 34
	<u>\$32,614 91</u>

LIABILITIES.

Capital stock,	\$8,500 00
Notes payable,	8,300 00
Unpaid bills,	15,814 91

Total liabilities, as per books of the company,	<u>\$32,614 91</u>
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$1,396 34
Balance June 30, 1890,	\$1,396 34	
	<u>\$1,396 34</u>	<u>\$1,396 34</u>

ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$20,005 60
Machinery and manufacturing appliances,	6,002 05
Meters,	1,350 74
Due for gas,	367 67
Gas coal on hand,	828 75
Coke on hand,	50 00
Enrichers on hand,	213 75
Gas fixtures on hand,	406 42
Sundry accounts due the company,	8,852 16
Office furniture,	200 00
Cash on hand,	104 60
Total assets, as per books of the company,	<u>\$38,381 74</u>

LIABILITIES.

Capital stock,	<u>\$17,300 00</u>
Total liabilities, as per books of the company,	\$17,300 00
Profit and loss balance,	21,081 74
	<u>\$38,381 74</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$20,012 89
Balance of gas manufacturing account,		6,382 01
Interest received,		33 34
Rents,		91 00
Dividends declared,	\$3,460 00	
Rebate of 84 cents per M. to manufacturers who are stockholders,	1,977 50	
Balance June 30, 1890,	21,081 74	
	<u>\$26,519 24</u>	<u>\$26,519 24</u>

AMESBURY AND SALISBURY GAS COMPANY.

ASSETS.

Real estate,	\$4,875 98
Machinery and manufacturing appliances,	40,255 50
Street mains,	16,250 00
Meters,	1,498 39
Due for gas,	713 92
Gas coal on hand,	990 30
Enrichers on hand,	32 00
Purifying materials on hand,	10 60
Cash on hand,	798 73
Total assets, as per books of the company,	<u>\$65,425 42</u>

LIABILITIES.

Capital stock,	\$60,000 00
Unpaid bills,	25 00
<hr/>	
Total liabilities, as per books of the company, . . .	\$60,025 00
Profit and loss balance,	5,400 42
<hr/>	
	\$65,425 42

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$3,243 95
Balance of gas manufacturing account,		1,858 87
Unpaid bills,		1,192 14
Other items of income,		692 82
Dividends declared,	\$1,200 00	
Other items,	387 36	
Balance June 30, 1890,	5,400 42	
<hr/>		
	\$6,987 78	\$6,987 78

AMHERST GAS COMPANY.

ASSETS.

Real estate (gas),	}	\$7,978 18
Machinery and manufacturing appliances (gas),		
Street mains (gas),		6,615 77
Meters (gas),		1,429 42
Due for gas,		882 47
Coke on hand,		10 12
Enrichers on hand,		171 05
Real estate (electric),		1,245 32
Steam plant (electric),	}	32,532 68
Electric plant,		
Lines, meters, lamps and globes (electric),		
Due for electric light,		952 12
Fuel on hand (electric light),		25 00
Oil and waste on hand,		86 20
Incandescent lamps on hand,		155 15
Other electric materials on hand,		1,600 96
Sundry accounts due the company,		209 79
Office furniture,		55 15
Cash on hand,		142 07
Notes receivable,		26 00
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Total assets, as per books of the company,		\$54,117 45

LIABILITIES.

Capital stock,	\$25,000 00
Bonds issued,	15,000 00
Notes payable,	3,500 00
Interest due but not paid,	418 75
Amounts due from the company, not included above, .	3,433 43
• Total liabilities, as per books of the company, . .	\$47,352 18
Profit and loss balance,	6,765 27
	<u>\$54,117 45</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$6,848 63
Balance of electric manufacturing account,	\$90 52	
Balance of gas manufacturing account,		1,061 44
Dividends declared,	1,000 00	
Interest paid,	456 25	
Depreciation,	101 31	
Other items,		503 28
Balance June 30, 1890,	6,765 27	
	<u>\$8,413 35</u>	<u>\$8,413 35</u>

ANDOVER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$12,380 80
Steam plant,	10,387 86
Electric plant,	18,451 98
Lines, meters, lamps and globes,	13,229 62
Due for electric light and power,	547 69
Horses, wagons, etc.,	294 50
Cash on hand,	252 90

Total assets, as per books of the company, \$55,545 35

LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	24,400 00
Unpaid bills,	821 65

Total liabilities, as per books of the company, \$55,221 65

Profit and loss balance, 323 70

\$55,545 35

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$323 70
Balance June 30, 1890,	\$323 70	
	<u>\$323 70</u>	<u>\$323 70</u>

ARLINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,000 00
Machinery and manufacturing appliances,	35,000 00
Street mains,	34,000 00
Due for gas,	3,263 71
Gas coal on hand,	412 50
Cash on hand,	3,496 52
Total assets, as per books of the company,	<u>\$77,172 73</u>

LIABILITIES.

Capital stock,	\$70,000 00
Unpaid dividends,	672 00
Total liabilities, as per books of the company,	<u>\$70,672 00</u>
Profit and loss balance,	6,500 73
	<u>\$77,172 73</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$5,696 83
Balance of gas manufacturing account,		5,706 15
Dividends declared,	\$4,200 00	
Construction charged off,	702 25	
Balance June 30, 1890,	6,500 73	
	<u>\$11,402 98</u>	<u>\$11,402 89</u>

ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$12,115 88
Machinery and manufacturing appliances,	24,351 84
Street mains,	10,568 16
Meters,	1,822 00
Due for gas,	1,520 77
Gas coal on hand,	1,697 85
Coke on hand,	70 40
Tar on hand,	172 80
Purifying materials on hand,	5 50
Other gas materials on hand,	448 71
Stoves on hand,	267 91
Office furniture,	131 20
Cash on hand,	64 65
Total assets, as per books of the company,	<u>\$53,237 67</u>

LIABILITIES.

Capital stock,	\$46,400 00
Unpaid bills,	56 00
Total liabilities, as per books of the company, . . .	\$46,456 00
Profit and loss balance,	6,781 67
	<u>\$53,237 67</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$3,448 42
Balance of gas manufacturing account,		6,143 65
Dividends declared,	\$2,784 00	
Interest paid,	59 60	
Other items,		33 20
Balance June 30, 1890,	6,781 67	
	<u>\$9,625 27</u>	<u>\$9,625 27</u>

BAY STATE GAS COMPANY.

ASSETS.

Real estate,	}	. . . \$1,950,000 00
Machinery and manufacturing appliances,		
Street mains,		
Due for gas,		22,330 00
Gas coal on hand,		9,635 85
Coke on hand,		113 25
Gas on hand,		1,599 00
Enrichers on hand,		9,744 59
Purifying materials on hand,		1,158 11
Other gas materials on hand,		536 48
Works improvements,		10,138 70
Horses, wagons, etc.,		790 50
Sundry accounts due the company,		3,254 17
Cash on hand,		20,425 84
Notes receivable,		9,000 00
Total assets, as per books of the company,		<u>\$5,038,726 49</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	4,512,000 00
Unpaid bills,	2,651 16
Amount due from the company, not included above,	3,100 00
Total liabilities, as per books of the company,	\$5,017,751 16
Profit and loss balance,	20,075 33
	<u>\$5,038,726 49</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,	\$43,923 38	
Balance of gas manufacturing account, .		\$53,798 64
Use of mains,		100,000 00
Tar,		11,522 23
Dividends declared,	10,000 00	
Interest paid,	90,422 16	
Balance June 30, 1890,	20,975 33	
	<hr/>	<hr/>
	\$165,320 87	\$165,320 87

BEVERLY GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$23,000 00
Machinery and manufacturing appliances (gas), . .	8,207 84
Street mains (gas),	14,044 47
Meters (gas),	3,430 04
Due for gas,	3,926 17
Gas coal on hand,	1,525 00
Coke on hand,	1 00
Tar on hand,	15 00
Enrichers on hand,	18 00
Other gas materials on hand,	24 13
Stoves on hand,	295 26
Gas fixtures and Lungren lamps on hand,	515 75
Electric plant,	21,568 69
Due for electric light and power,	720 18
Carbons on hand,	51 25
Oil and waste on hand,	29 40
Globes on hand,	6 00
Sundry accounts due the company,	298 69
Office furniture,	260 47
Cash on hand,	10,970 80
Investments,	500 00
	<hr/>
Total assets, as per books of the company, . . .	\$89,408 14

LIABILITIES.

Capital stock,	\$60,000 00
Special stock,	11,800 00
Notes payable,	5,886 12
Unpaid bills,	1,092 04
	<hr/>
Total liabilities as per books of the company, . .	\$78,778 16
Profit and loss balance,	10,629 98
	<hr/>
	\$89,408 14

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$8,816 34
Balance of gas manufacturing account,		8,016 74
Balance of electric manufacturing account,		2,438 30
Rents,		57 70
Other items of income,		209 92
Dividends declared,	\$3,000 00	
Interest paid,	1,195 47	
Depreciation,	4,384 22	
Other items,	329 33	
Balance June 30, 1890,	10,629 98	
	<u>\$19,539 00</u>	<u>\$19,539 00</u>

BLUE HILL ELECTRIC COMPANY (CANTON.)

ASSETS.

Real estate,	\$3,322 70
Steam plant,	5,286 25
Electric plant,	6,698 30
Lines, meters, lamps and globes,	9,504 71
Total assets, as per books of the company,	<u>\$24,811 96</u>

LIABILITIES.

Capital stock,	\$20,000 00
Unpaid bills,	4,811 96
Total liabilities, as per books of the company,	<u>\$24,811 96</u>

BOSTON ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$324,125 63
Steam plant,	217,903 56
Electric plant,	268,553 22
Lines, meters, lamps and globes,	648,107 89
Due for electric light and power,	25,578 12
Fuel on hand,	12,265 68
Carbons on hand,	2,318 60
Oil and waste on hand,	100 23
Incandescent lamps on hand,	1,379 40
Globes on hand,	1,147 50
Other electric materials on hand,	16,921 81
Motors on hand,	1,355 45
Horses, wagons, etc.,	889 39
Sundry accounts due the company,	4,501 48
Office furniture,	2,161 83
Cash on hand,	5,309 09
Total assets, as per books of the company,	<u>\$1,532,618 68</u>

LIABILITIES.

Capital stock,	\$1,000,000 00
Bonds issued,	291,000 00
Notes payable,	56,782 60
Unpaid bills,	24,135 32
Interest due but not paid,	5,894 25

Total liabilities, as per books of the company, . . .	\$1,377,812 17
Profit and loss balance,	154,806 51

\$1,532,618 68

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$105,821 77
Balance of electric manufacturing account,		133,767 21
Rents,		1,459 58
Other items of income,		8,217 08
Dividends declared,	\$60,000 00	
Interest paid,	19,759 13	
Paid leased companies,	14,700 00	
Balance June 30, 1890,	154,806 51	
	<hr/>	<hr/>
	\$249,265 64	\$249,265 64

BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,358,869 26
Machinery and manufacturing appliances,	3,024,397 06
Street mains,	1,913,278 85
Meters,	375,703 50
Due for gas,	158,961 61
Gas coal on hand,	81,665 24
Coke on hand,	24,677 50
Tar on hand,	9,601 35
Enrichers on hand,	2,639 16
Purifying materials on hand,	1,212 25
Other gas materials on hand,	47,265 51
Gas on hand,	1,918 28
Ammoniacal liquor on hand,	640 69
New work in process of construction, and not completed,	50,428 51
Sundry accounts due the company,	21,210 77
Cash on hand,	194,713 90
Notes receivable,	25,000 00

Total assets, as per books of the company, . . . \$7,292,183 44

LIABILITIES.

Capital stock,	\$2,500,000 00
Notes payable,	100,000 00
Unpaid bills,	40,605 05
Deposits,	19,894 54
Contingent fund,	301,964 38
Amounts due from the company, not included above,	12,621 62

Total liabilities, as per books of the company,	\$2,975,085 59
Profit and loss balance,	4,317,097 85

\$7,292,183 44

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$135,396 06
Balance of gas manufacturing account,		459,422 78
Rents,		9,126 66
Amount debited to profit and loss prior to Jan. 1, 1889, and credited June 30, 1890, as follows, viz. : —		
Improvements,		2,000,000 00
Mains,		1,240,605 45
Services,		356,774 64
Meters,		355,817 87
Amount debited to profit and loss June 30, 1889, and credited, as follows : —		
Improvements,		90,136 06
Street mains,		17,100 01
Meters,		4,207 05
Interest paid,	\$1,488 73	
Dividends declared,	250,000 00	
Use of gas mains,	100,000 00	
Balance June 30, 1890,	4,317,097 85	
	<hr/>	<hr/>
	\$4,668,586 58	\$4,668,586 58

BRIDGEWATER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$2,941 97
Steam plant,	3,864 02
Electric plant,	5,289 25
Lines, meters, lamps and globes,	12,506 84
Due for electric light and power,	347 72
Carbons on hand,	7 41
Oil and waste on hand,	24 90
Incandescent lamps on hand,	100 24

Globes on hand,	\$2 25
Other electric materials on hand.	18 25
Sundry accounts due the company,	197 25
Cash on hand,	454 28

Total assets, as per books of the company,	\$25,754 38
Profit and loss balance,	1,492 00
	<hr/>
	\$27,246 38

LIABILITIES.

Capital stock,	\$15,000 00
Unpaid bills,	12,246 38

Total liabilities, as per books of the company,	\$27,246 38
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of electric manufacturing account,	\$1,492 00	
Balance June 30, 1890,		\$1,492 00
	<hr/>	<hr/>
	\$1,492 00	\$1,492 00

BROCKTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$49,000 00
Machinery and manufacturing appliances,	100,463 86
Street mains,	
Meters,	2,148 20
Due for gas,	2,592 76
Gas coal on hand,	908 86
Coke on hand,	18 00
Tar on hand,	38 08
Enrichers on hand,	42 00
Purifying materials on hand,	20 00
Other gas materials on hand,	3,544 59
Stoves on hand,	459 51
Horses, wagons, etc.,	484 90
Sundry accounts due the company,	219 63
Office furniture,	164 15
Cash on hand,	564 61
Investments,	25,102 79

Total assets as per books of the company,	\$185,771 94
Profit and loss balance,	20,178 87
	<hr/>
	\$205,950 81

LIABILITIES.

Capital stock,	\$100,000 00
Bonds issued,	100,000 00
Unpaid bills,	5,950 81

Total liabilities, as per books of the company, . . . \$205,950 81

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$12,595 70
Balance of gas manufacturing account,		11,235 39
Rents,		2,170 00
Other items of income,		236 28
Dividends declared,	\$6,370 00	
Interest paid,	3,183 25	
Cancellation of lease,	35,000 00	
Depreciation,	373 52	
Other items,	1,489 47	
Balance June 30, 1890,		20,178 87
	<hr/> \$46,416 24	<hr/> \$46,416 24

BROOKLINE GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$203,220 38
Machinery and manufacturing appliances (gas),	7,838 66
Street mains (gas),	179,241 82
Meters (gas),	12,528 29
Due for gas,	18,024 09
Gas coal on hand,	1,375 50
Coke on hand,	349 50
Enrichers on hand,	1,808 00
Purifying materials on hand,	371 27
Other gas materials on hand,	10,218 47
Real estate (electric),	10,500 00
Steam plant (electric),	16,355 76
Electric plant,	50,988 99
Lines, meters, lamps and globes (electric),	46,421 79
Due for electric light and power,	3,539 09
Carbons on hand,	430 00
Oil and waste on hand,	19 85
Incandescent lamps on hand,	737 40
Globes on hand,	16 65
Horses, wagons, etc.,	1,814 20
Sundry accounts due the company,	972 49
Office furniture,	500 00
Cash on hand,	1,748 90

Total assets, as per books of the company, . . . \$569,021 10

LIABILITIES.

Capital stock,	\$450,000 00
Notes payable,	78,000 00
Unpaid bills,	12,572 55
Deposits,	260 00

Total liabilities, as per books of the company, . . .	\$540,832 55
Profit and loss balance,	28,188 55
	<u>\$569,021 10</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$28,987 02
Balance of gas manufacturing account,		45,172 65
Balance of electric manufacturing account,		2,823 43
Rents,		182 65
Other items of income,		83 42
Dividends declared,	\$29,250 00	
Interest paid,	4,263 33	
Construction charged off,	14,235 12	
Depreciation,	913 30	
Other items,	398 97	
Balance June 30, 1890,	28,188 45	
	<u>\$77,249 17</u>	<u>\$77,249 17</u>

CAMBRIDGE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$314,411 41
Steam plant,			
Electric plant,			
Lines, meters, lamps and globes,			
Franchise,			15,000 00
Fuel on hand,			7,031 03
Sundry accounts due the company,			14,332 35
Cash on hand,			1,764 04

Total assets, as per books of the company,	\$351,950 83
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LIABILITIES.

Capital stock,	\$200,000 00
Bonds issued,	50,000 00
Notes payable,	87,500 00
Unpaid bills,	8,050 20

Total liabilities, as per books of the company, . . .	\$345,550 20
Profit and loss balance,	6,400 63
	<u>\$351,950 83</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$9,321 62	
Balance of electric manufacturing account,		\$20,824 54
Interest paid,	5,102 29	
Balance June 30, 1890,	6,400 63	
	<u>\$20,824 54</u>	<u>\$20,824 54</u>

CAMBRIDGE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$64,767 66
Machinery and manufacturing appliances,	
Street mains,	} 733,159 32
Meters,	
Due for gas,	34,800 69
Gas coal on hand,	13,558 44
Coke on hand,	675 00
Tar on hand,	1,680 00
Purifying materials on hand,	150 00
Other gas materials on hand,	4,331 00
Lungren lamps,	4,145 50
Gas fixtures on hand,	1,766 00
Sundry accounts due the company,	3,426 46
Cash on hand,	28,945 57
Notes receivable,	48 28
Investments,	32,770 56
Total assets, as per books of the company,	<u>\$924,224 48</u>

LIABILITIES.

Capital stock,	\$700,000 00
Deposits,	1,766 60
Amounts due from the company, not included above,	5 60
Total liabilities, as per books of the company,	<u>\$701,772 20</u>
Profit and loss balance,	222,452 28
	<u>\$924,224 48</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$201,775 50
Balance of gas manufacturing account,		89,326 56
Interest received,		335 14
Rents,		1,015 08
Dividends declared,	\$70,000 00	
Balance June 30, 1890,	222,452 28	
	<u>\$292,452 28</u>	<u>\$292,452 28</u>

CHARLESTOWN GAS COMPANY.

ASSETS.

Real estate (gas),	}	. . . \$510,308 50
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Meters (gas),		
Due for gas,		17,443 63
Gas coal on hand,		2,594 23
Coke on hand,		104 00
Tar on hand,		490 00
Enrichers on hand,		205 56
Water gas plant,		20,660 00
Steam plant (electric),		5,566 50
Electric plant,		60,155 24
Due for electric light and power,		2,176 46
Cash on hand,		969 95
Investments,		23,155 00
Total assets, as per books of the company,		\$643,829 07

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	\$500,000	00
Notes payable,	.	.	.	.	.	.	.	.	5,000	00
Unpaid bills,	.	.	.	.	.	.	.	.	5,033	73
Deposits,	.	.	.	.	.	.	.	.	578	50
Suspense account,	.	.	.	.	.	.	.	.	919	29
Reserved fund,	.	.	.	.	.	.	.	.	58,355	59
									<hr/>	
Total liabilities, as per books of the company,	.	.							\$569,887	11
Profit and loss balance,	.	.	.	.	.	.	.	.	73,941	96
									<hr/>	
									\$643,829	07

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$46,516 16
Balance of gas manufacturing account,		53,244 16
Balance of electric manufacturing account,		6,515 15
Electric light plant,		17,974 11
Rents,		72 00
Other items of income,		549 09
Dividends declared,	\$50,000 00	
Interest paid,	928 71	
Balance June 30, 1890,	73,941 96	
		\$124,870 67
		\$124,870 67

CHELSEA GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$172,547 76
Machinery and manufacturing appliances (gas), }	
Street mains (gas), }	150,000 00
Meters (gas), }	
Due for gas,	10,055 12
Gas coal on hand,	3,122 02
Stoves on hand,	349 95
Real estate (electric),	3,160 48
Steam plant (electric),	16,395 45
Electric plant,	27,799 53
Lines, meters, lamps and globes (electric),	31,228 49
Due for electric light and power,	2,388 81
Carbons on hand,	100 00
Incandescent lamps on hand,	50 00
Sundry accounts due the company,	285 40
Cash on hand,	1,668 55

Total assets, as per books of the company, . . . \$419,151 56

LIABILITIES.

Capital stock,	\$300,000 00
Notes payable,	65,000 00
Deposits,	850 00

Total liabilities, as per books of the company, . . . \$365,850 00
 Profit and loss balance, 53,301 56

\$419,151 56

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$45,477 78
Balance of gas manufacturing account,		23,565 61
Balance of electric manufacturing account,		3,370 49
Rents,		176 00
Other items of income,		418 53
Dividends declared, \$18,000 00		
Interest paid, 1,565 95		
Other items, 140 90		
Balance June 30, 1890, 53,301 56		
	\$73,008 41	\$73,008 41

CHICOPEE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$2,000 77
Steam plant,	1,729 45
Electric plant,	4,153 00
Lines, meters, lamps and globes,	5,604 77
Other construction accounts,	719 85
Due for electric light and power,	300 00
Carbons on hand,	11 00
Oil and waste on hand,	3 50
Other electric materials on hand,	200 00
Cash on hand,	260 29

Total assets, as per books of the company, . . . \$14,982 63

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	2,600 00
Unpaid bills,	417 32
Interest due but not paid,	29 00

Total liabilities, as per books of the company, . . \$13,046 32

Profit and loss balance, 1,936 31

\$14,982 63

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$125 24
Balance of manufacturing account,		1,678 22
Interest paid,	\$221 90	
Other items,		354 75
Balance June 30, 1890,	1,936 31	
	<hr/> \$2,158 21	<hr/> \$2,158 21

CHICOPEE GAS WORKS.

ASSETS.

Real estate,	\$20,000 00
Machinery and manufacturing appliances,	1,300 00
Street mains,	6,500 00
Meters,	2,200 00
Due for gas,	11 67
Coke on hand,	27 00
Enrichers on hand,	55 00
Purifying materials on hand,	45 00

Sundry accounts due the company,	\$17,583 40
Cash on hand,	306 41
Notes receivable,	2,600 00
Investments,	10,000 00

Total assets, as per books of the company, . . . \$60,628 48

LIABILITIES.

Capital stock,	\$30,000 00
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Total liabilities, as per books of the company, . . \$30,000 00

Profit and loss balance, 30,628 48

\$60,628 48

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$29,514 36
Balance of manufacturing account,		3,459 29
Interest received,		818 91
Dividends declared,	\$3,600 00	
Other items,		435 92
Balance June 30, 1890,	30,628 48	
	<hr/>	<hr/>
	\$34,228 48	\$34,228 48

CITIZENS' GAS LIGHT COMPANY, OF QUINCY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	15,000 00
Street mains,	41,136 80
Meters,	3,500 00
Due for gas,	1,346 80
Gas coal on hand,	530 00
Coke on hand,	65 00
Tar on hand,	45 00
Enrichers on hand,	12 00
Purifying materials on hand,	75 00
Other gas materials on hand,	50 00
Stoves on hand,	975 00
Gas fixtures on hand,	1,200 00
Horses, wagons, etc.,	400 00
Office furniture,	200 00
Cash on hand,	390 70

Total assets, as per books of the company, . . . \$74,426 30

LIABILITIES.

Capital stock,	\$53,000 00
Notes payable,	19,000 00
Unpaid bills,	483 65
Unpaid dividends,	907 00

Total liabilities, as per books of the company, . .	\$73,390 65
Profit and loss balance,	1,035 65
	<hr/> \$74,426 30

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,	\$12,330 04	
Balance of gas manufacturing account, . .		\$7,890 36
Re-valuation of plant,		6,963 83
Rents,		144 00
Other items of income,		1,382 50
Dividends declared,	1,980 00	
Interest paid,	1,035 00	
Balance June 30, 1890,	1,035 65	
	<hr/> \$16,380 69	<hr/> \$16,380 69

CITIZENS' GAS LIGHT COMPANY (WAKEFIELD).

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances, . .		
Street mains,		
Meters,		\$99,767 47
Due for gas,		3,307 80
Gas coal on hand,		497 00
Coke on hand,		50 00
Tar on hand,		195 00
Enrichers on hand,		3 00
Purifying materials on hand,		50 00
Horses, wagons, etc.,		363 25
Office furniture,		153 50
Cash on hand,		2,607 81
Total assets, as per books of the company, . .		<hr/> \$106,994 83

LIABILITIES.

Capital stock,	\$95,300 00
Notes payable,	4,500 00
Unpaid bills,	1,227 73
Unpaid dividends,	253 00
Total liabilities, as per books of the company, . .	\$101,280 73
Profit and loss balance,	5,713 77
	<hr/> \$106,994 50

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$6,389 02
Balance of gas manufacturing account, .		1,230 75
Dividends declared,	\$1,906 00	
Balance June 30, 1890,	5,713 77	
	<hr/>	<hr/>
	\$7,619 77	\$7,619 77

CLINTON GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	}	\$27,000 00
Machinery and manufacturing appliances (gas),		
Street mains (gas),		9,000 00
Meters (gas),		538 25
Gas coal on hand,		674 73
Coke on hand,		7 00
Tar on hand,		125 00
Purifying materials on hand,		100 00
Other gas materials on hand,		610 18
Real estate (electric),		14,000 00
Addition to electric light plant,		16,255 00
Fuel on hand (electric light),		313 21
Carbons on hand,		77 00
Other electric materials on hand,		700 00
Office furniture,		200 00
Cash on hand,		4,649 31
		<hr/>
Total assets, as per books of the company,		\$74,249 68

LIABILITIES.

Capital stock,	\$35,000 00
Notes payable,	30,500 00
	<hr/>
Total liabilities, as per books of the company,	\$65,500 00
Profit and loss balance,	8,749 68
	<hr/>
	\$74,249 68

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$5,620 78
Balance of gas manufacturing account, .		5,556 51
Balance of electric manufacturing account, .		880 42
Other items of income,		203 55
Dividends declared,	\$1,750 00	
Interest paid,	1,125 45	
Construction charged off,	686 13	
Balance June 30, 1890,	8,749 68	
	<hr/>	<hr/>
	\$12,261 26	\$12,261 26

COTTAGE CITY GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate (gas),	}	
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Meters (gas),		
Due for gas,		70 60
Gas coal on hand,		125 00
Enrichers on hand,		185 00
Other gas materials on hand,		283 41
Stoves on hand,		187 76
Real estate (electric),	}	
Steam plant (electric),		
Electric plant,		
Lines, meters, lamps and globes (electric),		
Carbons on hand,		5 00
Oil and waste on hand,		31 35
Globes on hand,		5 50
Electric fixtures on hand,		136 70
Sundry accounts due the company,		41 62
Office furniture,		37 25
Cash on hand,		248 07
Total assets, as per books of the company,		<u>\$26,742 26</u>

LIABILITIES.

Capital stock,	\$25,000 00
Unpaid bills,	1,118 05
Total liabilities, as per books of the company,	<u>\$26,118 05</u>
Profit and loss balance,	624 21
	<u>\$26,742 26</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of gas manufacturing account,	\$191 24	
Balance of electric manufacturing account,		\$815 45
Balance June 30, 1890,	624 21	
	<u>\$815 45</u>	<u>\$815 45</u>

DANVERS GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
		\$21,142 13

Meters,	\$374 40
Due for gas,	234 63
Gas coal on hand,	1,147 56
Coke on hand,	25 00
Tar on hand,	25 00
Stoves on hand,	44 80
Gas fixtures on hand,	214 66
Cash on hand,	84 98

Total assets, as per books of the company, . . . \$23,293 16

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	3,000 00

Total liabilities, as per books of the company, . . \$23,000 00
 Profit and loss balance, 293 16
 \$23,293 16

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$800 79	
Balance of gas manufacturing account,		\$1,242 20
Interest paid,	148 25	
Balance June 30, 1890,	293 16	
	<u>\$1,242 20</u>	<u>\$1,242 20</u>

DEDHAM ELECTRIC COMPANY.

ASSETS.

Real estate,	\$12,900 24
Steam plant,	14,173 31
Electric plant,	17,309 48
Lines, meters, lamps and globes,	38,342 17
Due for electric light and power,	688 96
Fuel on hand,	190 00
Carbons on hand,	57 00
Oil and waste on hand,	51 40
Incandescent lamps on hand,	407 20
Globes on hand,	45 00
Sundry accounts due the company,	1,294 30
Cash on hand,	636 04

Total assets, as per books of the company, . . . \$86,095 10

LIABILITIES.

Capital stock,	\$60,000 00
Notes payable,	10,686 53
Unpaid bills,	14,318 67
<hr/>	
Total liabilities, as per books of the company, . .	\$85,005 20
Profit and loss balance,	1,089 90
<hr/>	
	\$86,095 10

PROFIT AND LOSS ACCOUNT.

	De.	Cr.
Balance of electric manufacturing account,		\$1,279 82
Interest paid,	\$189 92	
Balance June 30, 1890,	1,089 90	
<hr/>		<hr/>
	\$1,279 82	\$1,279 82

DEDHAM AND HYDE PARK GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$8,009 05
Machinery and manufacturing appliances,	12,607 73
Street mains,	21,585 99
Meters,	1,524 08
Due for gas,	1,074 90
Gas coal on hand,	381 50
Coke on hand,	39 78
Tar on hand,	70 00
Enrichers on hand,	5 00
Stoves, gas engines and fixtures on hand,	2,419 98
Horses, wagons, etc.,	332 10
Office furniture,	159 88
Cash on hand,	2,330 18
<hr/>	
Total assets, as per books of the company, . .	\$50,540 12
Profit and loss balance,	58,369 80
<hr/>	
	\$108,909 92

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	8,500 00
Unpaid bills,	409 92
<hr/>	
Total liabilities, as per books of the company, . .	\$108,909 92

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$60,641 30	
Balance of gas manufacturing account, .		\$3,528 03
Rents,		110 00
Other items of income,		21 95
Interest paid,	550 26	
Depreciation,	828 22	
Balance June 30, 1890,		58,369 80
	<hr/>	<hr/>
	\$62,019 78	\$62,019 78

DORCHESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		\$499,901 52
Street mains,		
Meters,		9,321 86
Due for gas,		15,159 43
Gas coal on hand,		3,324 63
Coke on hand,		82 50
Gas on hand,		188 45
Enrichers on hand,		627 35
Purifying materials on hand,		312 80
Other gas materials on hand,		4,796 03
Lungren lamps on hand,		144 63
Sundry accounts due the company,		7,319 03
Cash on hand,		4,257 17
Notes receivable,		42,000 00
		<hr/>
Total assets, as per books of the company,		\$587,435 40

LIABILITIES.

Capital stock,	\$400,000 00
Unpaid bills,	23,495 58
Deposits,	215 00
Amounts due from the company, not included above,	2,465 15
	<hr/>
Total liabilities, as per books of the company,	\$426,175 73
Profit and loss balance,	161,259 67
	<hr/>
	\$587,435 40

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$147,663 02
Balance of gas manufacturing account,		35,592 76
Interest received,		1,686 07
Rents,		108 77
Other items of income,		474 21
Dividends declared,	\$24,000 00	
Other items,	265 16	
Balance June 30, 1890,	161,259 67	
	<u>\$185,524 83</u>	<u>\$185,524 83</u>

EAST BOSTON GAS COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Due for gas,		5,908 97
Gas coal on hand,		8,620 78
Purifying materials on hand,		206 02
Other gas materials on hand,		274 97
Stoves on hand,		217 56
Lungren lamps on hand,		1,597 74
Sundry accounts due the company,		20 87
Cash on hand,		18,517 45
Investments,		36,000 00
Total assets, as per books of the company,		<u>\$296,981 59</u>

LIABILITIES.

Capital stock,	\$220,000 00
Unpaid bills,	2,390 89
Deposits,	145 00
Total liabilities, as per books of the company,	<u>\$222,535 89</u>
Profit and loss balance,	74,445 70
	<u>\$296,981 59</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890.		\$60,188 25
Balance of gas manufacturing account,		22,616 06
Interest received,		2,547 50
Other items of income,		93 89
Dividends declared,	\$11,000 00	
Balance June 30, 1890,	74,445 70	
	<u>\$85,445 70</u>	<u>\$85,445 70</u>

EASTHAMPTON GAS COMPANY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	10,500 00
Street mains,	8,000 00
Meters,	500 00
Due for gas,	818 76
Gas coal on hand,	139 05
Tar on hand,	22 50
Enrichers on hand,	39 00
Purifying materials on hand,	30 00
Other gas materials on hand,	245 00
Cash on hand,	563 55
Notes receivable,	5,000 00

Total assets, as per books of the company, . . . \$35,357 86

LIABILITIES.

Capital stock,	\$30,000 00
Unpaid bills,	692 09

Total liabilities, as per books of the company, . . . \$30,692 09

Profit and loss balance, 4,665 77

\$35,357 86

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$4,310 45
Balance of gas manufacturing account,		2,648 78
Interest received,		166 82
Other items of income,		50 00
Dividends declared,	\$2,400 00	
Other items,	110 28	
Balance June 30, 1890,	4,665 77	
	<u>\$7,176 05</u>	<u>\$7,176 05</u>

EDISON ELECTRIC ILLUMINATING COMPANY, OF BOSTON.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$1,180,521 08
Steam plant,			
Electric plant,			
Lines, meters, lamps and globes,			
Patent rights,			
Due for electric light and power,			29,638 48
Materials on hand,			43,061 43

Sundry accounts due the company,	\$906 57
Cash on hand,	9,680 91
Notes receivable,	136,031 93
Total assets, as per books of the company,	\$1,399,825 68
Profit and loss balance,	17,901 45
	<u>\$1,417,727 13</u>

LIABILITIES.

Capital stock,	\$1,160,000 00
Bonds issued,	150,000 00
Notes payable,	35,000 00
Unpaid bills,	47,139 93
Reserved fund,	12,000 00
Amounts due from the company, not included above, .	13,587 20
Total liabilities, as per books of the company, . .	<u>\$1,417,727 13</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$5,913 83
Balance of electric manufacturing account,		82,796 34
Dividends declared,	\$12,500 00	
Interest paid,	12,111 62	
Construction charged off,	70,000 00	
Carried to reserve fund,	12,000 00	
Balance June 30, 1890,		17,901 45
	<u>\$106,611 62</u>	<u>\$106,611 62</u>

EDISON ELECTRIC ILLUMINATING COMPANY,
OF BROCKTON.

ASSETS.

Real estate,	\$29,990 97
Steam plant,	26,409 59
Electric plant,	18,413 01
Lines, meters, lamps and globes,	43,379 18
Patent rights,	16,500 00
Due for electric light and power,	5,521 95
Carbons on hand,	139 75
Oil and waste on hand,	55 27
Incandescent lamps on hand,	2,879 03
Arc system, motor lines, etc.,	45,321 54
Other electric materials on hand,	2,365 35
Motors on hand,	372 16
Sundry accounts due the company,	2,357 75
Cash on hand,	1,091 02
Total assets, as per books of the company,	<u>\$194,796 57</u>

LIABILITIES.

Capital stock,	\$85,000 00
Bonds issued,	80,000 00
Notes payable,	12,500 00
Interest due but not paid,	933 34
Depreciation fund,	13,703 07
<hr/>	
Total liabilities, as per books of the company, . . .	\$192,136 41
Profit and loss balance,	2,660 16
<hr/>	
	\$194,796 57

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$15,577 29
Dividends declared,	\$3,550 00	
Interest paid,	6,630 00	
Depreciation fund,	1,960 40	
Other items,	776 73	
Balance June 30, 1890,	2,660 16	
	<hr/>	<hr/>
	\$15,577 29	\$15,577 29

EDISON ELECTRIC ILLUMINATING COMPANY,
OF FALL RIVER.

ASSETS.

Real estate, }	\$75,017 70
Steam plant, }	
Electric plant, }	
Patent rights,	27,000 00
Due for electric light and power,	800 00
Incandescant lamps on hand,	1,378 95
Other electric materials on hand,	2,747 50
Motors on hand,	5,078 06
Sundry accounts due the company,	1,463 69
Office furniture,	281 00
Cash on hand,	596 48
<hr/>	
Total assets, as per books of the company,	\$114,364 34

LIABILITIES.

Capital stock,	\$81,600 00
Notes payable,	17,000 00
Unpaid bills,	4,497 40
<hr/>	
Total liabilities, as per books of the company, . . .	\$103,097 40
Profit and loss balance,	11,266 94
<hr/>	
	\$114,364 34

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$2,480 77
Balance of electric manufacturing account,		12,034 17
Dividends declared,	\$2,448 00	
Interest paid,	800 00	
Balance June 30, 1890,	11,266 94	
	<u>\$14,514 94</u>	<u>\$14,514 94</u>

EDISON ELECTRIC ILLUMINATING COMPANY
OF LAWRENCE.

ASSETS.

Real estate,	}		
Steam plant,			
Electric plant,			
Lines, meters, lamps and globes,			
Patent rights,			
Due for electric light and power,			1,144 06
Fuel on hand,			207 24
Carbons on hand,			60 00
Oil and waste on hand,			125 28
Incandescent lamps on hand,			94 00
Motors on hand,			2,596 29
Steam heating plant,			2,850 78
Municipal lighting plant,			17,742 63
Chimney,			2,391 91
Cash on hand,			804 72
Merchandise on hand,			988 79
Total assets, as per books of the company,			<u>\$107,538 63</u>

LIABILITIES.

Capital stock,	\$65,000 00
Notes payable,	39,200 00
Total liabilities, as per books of the company,	<u>\$104,200 00</u>
Profit and loss balance,	3,338 63
	<u>\$107,538 63</u>

ELECTRIC LIGHT AND PATENT FLOORING COMPANY
(AMESBURY).

ASSETS.

Land, and mill building thereon,	\$28,000 00
Mill machinery,	13,900 00
Storehouse,	3,000 00
Mill sprinklers,	800 00
Real estate (electric),	10,781 90
Steam plant,	7,996 10
Electric plant, }	
Lines, meters, lamps and globes, }	22,086 88
Patent rights,	4,000 00
Due for power and electric light,	2,954 88
Fuel on hand,	275 00
Motors on hand,	25 00
Horses, wagons, etc.,	175 00
Sundry accounts due the company,	443 49
Cash on hand,	62 02
Investments,	2,000 00

Total assets, as per books of the company, . . . \$96,500 27

LIABILITIES.

Capital stock,	\$38,100 00
Notes payable,	53,415 00
Unpaid bills,	1,898 90
Interest due but not paid,	690 00

Total liabilities, as per books of the company, . . \$94,103 90

Profit and loss balance, 2,396 37

\$96,500 27

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$12 72
Balance of electric manufacturing account,		5,378 46
Interest paid,	\$2,590 00	
Other items,	404 81	
Balance June 30, 1890,	2,896 37	
	\$5,391 18	\$5,391 18

FALL RIVER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$21,995 13
Steam plant,	21,843 82
Electric plant,	34,697 64
Lines, meters, lamps and globes,	26,927 34
Due for electric light and power,	2,792 61
Notes receivable,	3,994 10

Total assets, as per books of the company, . . . \$112,250 64

LIABILITIES.

Capital stock,	\$90,000 00
Notes payable,	18,500 00
Unpaid bills,	1,036 51

Total liabilities, as per books of the company, . . . \$109,536 51

Profit and loss balance, 2,714 13

\$112,250 64

PROFIT AND LOSS ACCOUNT

	DR.	CR.
Balance June 30, 1889,		\$7,287 95
Balance of electric manufacturing account,		11,243 22
Rents,		228 03
Dividends declared,	\$7,200 00	
Interest paid,	845 07	
Patent rights,	8,000 00	
Balance June 30, 1890,	2,714 13	
	\$18,759 20	\$18,759 20

FALL RIVER GAS WORKS COMPANY.

ASSETS.

Real estate,	\$135,169 97
Machinery and manufacturing appliances,	65,994 05
Street mains,	90,232 57
Meters,	17,295 10
Due for gas,	2,785 93
Gas coal on hand,	3,881 42
Coke on hand,	40 00
Tar on hand,	183 04
Enrichers on hand,	419 99
Purifying materials on hand,	123 32
Other gas materials on hand,	4,994 30
Stoves on hand,	1,702 79
Gas fixtures on hand,	975 44

Small improvements,	\$2,256 00
Tool wagons,	86 40
Sundry accounts due the company,	507 34
Office furniture,	403 96
Cash on hand,	1,331 01
Notes receivable,	17,500 00

Total assets, as per books of the company, . . . \$345,882 63

LIABILITIES.

Capital stock,	\$288,000 00
Unpaid bills,	7,375 46
Deposits,	165 60

Total liabilities, as per books of the company, . . . \$295,541 06

Profit and loss balance, 50,341 57

\$345,882 63

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$32,150 87
Balance of gas manufacturing account,		31,885 08
Rents,		770 00
Other items of income,		31 25
Dividends declared,	\$14,400 00	
Other items,	95 63	
Balance June 30, 1890,	50,341 57	
	\$64,837 20	\$64,837 20

FITCHBURG GAS COMPANY.

ASSETS.

Real estate (gas),	\$8,500 00
Machinery and manufacturing appliances (gas),	17,659 87
Street mains (gas),	10,000 00
Meters (gas),	5,000 00
Due for gas,	896 08
Gas coal on hand,	600 00
Real estate (electric),	22,705 85
Steam plant (electric),	10,000 00
Electric plant,	35,000 00
Lines, meters, lamps and globes (electric),	41,900 66
Due for electric light and power,	100 40
Incandescent lamps on hand,	553 27
Globes on hand,	52 19
Other electric materials on hand,	380 20
Cash on hand,	4,141 05
Notes receivable,	3,826 19
Water works,	8,184 24

Total assets, as per books of the company, . . . \$169,500 00

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	68,000 00
Depreciation fund,	1,500 00

Total liabilities, as per books of the company, . . . \$169,500 00

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$10,473 57
Balance of gas manufacturing account,		10,377 63
Balance of electric manufacturing account,		8,146 00
Interest received,		581 85
Other items of income,		1,071 57
Dividends declared,	\$8,000 00	
Electric construction charged off,	20,401 25	
Gas construction charged off,	268 83	
Depreciation,	277 35	
Carried to depreciation fund,	1,500 00	
	\$30,590 63	\$30,590 63

FRAMINGHAM ELECTRIC COMPANY.

ASSETS.

Real estate,	\$13,050 82
Steam plant,	26,150 35
Electric plant,	40,811 30
Lines, meters, lamps and globes,	51,441 89
Patent rights,	20,000 00
Due for electric light and power,	1,230 00
Fuel on hand,	5 75
Carbons on hand,	20 00
Oil and waste on hand,	17 00
Incandescent lamps on hand,	420 00
Globes on hand,	7 00
Other electric materials on hand,	975 00
Cash on hand,	324 21

Total assets, as per books of the company, . . . \$154,453 32

LIABILITIES.

Capital stock,	\$80,000 00
Bonds issued,	50,000 00
Notes payable,	3,725 00
Unpaid bills,	335 00
Amounts due from the company, not included above,	19,238 84

Total liabilities, as per books of the company, . . . \$153,296 84

Profit and loss balance, 1,156 48

\$154,453 32

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$538 94
Balance of electric manufacturing account,		3,698 29
Interest paid,	\$3,080 75	
Balance June 30, 1890,	1,156 48	
	<u>\$4,237 23</u>	<u>\$4,237 23</u>

FRANKLIN ELECTRIC LIGHT COMPANY (TURNER'S FALLS).

ASSETS.

Electric plant,	}	
Lines, meters, lamps and globes,		\$10,801 60
Carbons on hand,		11 00
Incandescent lamps on hand,		41 00
Globes on hand,		8 00
Sundry accounts due the company,		11 25
Cash on hand,		50 74
Total assets, as per books of the company,		<u>\$10,923 59</u>

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	618 00
Total liabilities, as per books of the company,	<u>\$10,618 00</u>
Profit and loss balance,	305 59
	<u>\$10,923 59</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$78 49
Balance of electric manufacturing account,		427 10
Dividends declared,	\$200 00	
Balance June 30, 1890,	305 59	
	<u>\$505 59</u>	<u>\$505 59</u>

GARDNER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$9,372 13
Steam plant,	12,578 29
Electric plant,	20,405 22
Lines, meters, lamps and globes,	18,593 29
Due for electric light and power,	569 61
Fuel on hand,	175 22
Carbons on hand,	85 00

Oil and waste on hand,	\$36 50
Incandescent lamps on hand,	215 00
Globes on hand,	15 00
Other electric materials on hand,	2,052 28
Electric fixtures on hand,	56 00
Horses, wagons, etc.,	155 00
Sundry accounts due the company,	1,085 88
Office furniture,	78 85
Cash on hand,	1,218 16

Total assets, as per books of the company,	\$66,691 43
Profit and loss balance,	2,695 27
	<hr/>
	\$69,386 70

LIABILITIES.

Capital stock,	\$28,700 00
Notes payable,	37,500 00
Unpaid bills,	3,186 70

Total liabilities, as per books of the company,	\$69,386 70
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$1,026 53	
Balance of electric manufacturing account,		\$37 60
Other items of income,		95 16
Interest paid,	1,801 50	
Balance June 30, 1890,		2,695 27
	<hr/>	<hr/>
	\$2,828 03	\$2,828 03

GARDNER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$8,800 00
Machinery and manufacturing appliances,	7,750 00
Street mains,	33,672 89
Meters,	1,250 00
Due for gas,	371 54
Enrichers on hand,	360 00
Stoves on hand,	75 00
Gas fixtures on hand,	450 00
Horses, wagons, etc.,	475 00
Sundry accounts due the company,	270 00
Office furniture,	100 00
Cash on hand,	125 50

Total assets, as per books of the company,	\$53,699 93
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LIABILITIES.	
Capital stock,	\$30,000 00
Bonds issued,	12,500 00
Notes payable,	800 00
Unpaid bills,	345 20
Amounts due from the company, not included above, .	7,000 00
<hr/>	
Total liabilities, as per books of the company, . .	\$50,645 20
Profit and loss balance,	3,054 73
<hr/>	
	\$53,699 93

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$3,300 19
Balance of gas manufacturing account, .		53 94
Other items of income,		450 60
Interest paid,	\$750 00	
Balance June 30, 1890,	3,054 73	
<hr/>		<hr/>
	\$3,804 73	\$3,804 73

GLOUCESTER ELECTRIC COMPANY.

ASSETS.	
Real estate,	\$4,650 00
Steam plant,	5,594 75
Electric plant,	12,151 24
Lines, meters, lamps and globes,	11,276 34
Due for electric light and power,	1,004 76
Carbons on hand,	90 00
Oil and waste on hand,	37 69
Incandescent lamps on hand,	287 57
Globes on hand,	7 60
Other electric materials on hand,	9 18
Horses, wagons, etc.,	92 45
Sundry accounts due the company,	557 11
Unexpired insurance,	60 00
Cash on hand,	105 99
Notes receivable,	450 00
<hr/>	
Total assets, as per books of the company,	\$36,375 28

LIABILITIES.	
Capital stock,	\$20,000 00
Notes payable,	4,116 40
Unpaid bills,	7,541 08
House construction,	74 38
<hr/>	
Total liabilities, as per books of the company, . .	\$31,731 86
Profit and loss balance,	4,643 42
<hr/>	
	\$36,375 28

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$2,634 33
Balance of electric manufacturing account,		1,886 02
Rents,		277 02
Interest paid,	\$103 95	
Balance June 30, 1890,	4,643 42	
	<u>\$4,747 37</u>	<u>\$4,747 37</u>

GLOUCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$37,500 00
Machinery and manufacturing appliances,	13,000 00
Street mains,	33,680 01
Meters,	2,500 00
Due for gas,	3,683 14
Gas coal on hand,	805 50
Tar on hand,	50 00
Purifying materials on hand,	125 00
Other gas materials on hand,	515 00
Stoves on hand,	100 00
Gas fixtures on hand,	400 00
Sundry accounts due the company,	2,686 51
Office furniture,	150 00
Cash on hand,	1,012 59
Notes receivable,	600 00
Total assets, as per books of the company,	<u>\$96,807 75</u>

LIABILITIES.

Capital stock,	\$62,300 00
Unpaid bills,	4,395 52
Total liabilities, as per books of the company,	<u>\$66,695 52</u>
Profit and loss balance,	30,112 23
	<u>\$96,807 75</u>

PROFIT AND LOSS ACCOUNT

	Dr.	Cr.
Balance June 30, 1889,		\$31,063 55
Balance of gas manufacturing account,		2,918 75
Interest received,		509 75
Rents,		2,378 60
Other items of income,		717 58
Dividends declared,	\$7,476 00	
Balance June 30, 1890,	30,112 23	
	<u>\$37,588 23</u>	<u>\$37,588 23</u>

GREAT BARRINGTON ELECTRIC LIGHT COMPANY.

ASSETS.	
Steam plant,	\$5,530 28
Electric plant,	}
Lines, meters, lamps and globes,	
Patent rights,	19,341 67
Due for electric light and power,	513 08
Fuel on hand,	97 65
Carbons on hand,	8 00
Incandescent lamps on hand,	303 68
Globes on hand,	7 20
Other electric materials on hand,	944 21
Sundry accounts due the company,	102 91
Cash on hand,	841 20
Total assets, as per books of the company,	<u>\$27,689 88</u>

LIABILITIES.	
Capital stock,	\$22,300 00
Notes payable,	3,300 00
Unpaid bills,	1,766 98
Interest due but not paid,	60 92
Total liabilities, as per books of the company,	<u>\$27,427 90</u>
Profit and loss balance,	261 98
	<u>\$27,689 88</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$265 55
Balance of electric manufacturing account,		693 74
Dividends declared,	\$480 00	
Interest paid,	213 01	
Depreciation,	4 30	
Balance June 30, 1890,	261 98	
	<u>\$959 29</u>	<u>\$959 29</u>

GREAT BARRINGTON GAS LIGHT COMPANY.

ASSETS.	
Street mains, }	\$1,000 00
Meters, . }	
Due for gas,	231 70
Total assets, as per books of the company,	<u>\$1,231 70</u>
Profit and loss balance,	4,567 27
	<u>\$5,798 97</u>

LIABILITIES.

Capital stock,	\$5,000 00
Unpaid bills,	798 97
<hr/>	
Total liabilities, as per books of the company, . . .	\$5,798 97

GREENFIELD ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$4,000 00
Steam plant,	10,030 07
Electric plant,	23,065 04
Due for electric light and power,	394 75
Fuel on hand,	525 25
Carbons on hand,	54 00
Oil and waste on hand,	76 80
Incandescent lamps on hand,	358 40
Other electric materials on hand,	922 60
Sundry accounts due the company,	710 99
Cash on hand,	230 01
<hr/>	
Total assets, as per books of the company, . . .	\$40,366 91

LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	8,000 00
Unpaid bills,	2,247 47
<hr/>	
Total liabilities, as per books of the company, . . .	\$40,247 49
Profit and loss balance,	119 42
<hr/>	
	\$40,366 91

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$576 45
Balance of electric manufacturing account,		503 63
Dividends declared,	\$450 00	
Interest paid,	510 66	
Balance June 30, 1890,	119 42	
<hr/>		<hr/>
	\$1,080 08	\$1,080 08

GREENFIELD GAS LIGHT COMPANY.

ASSETS.		
Real estate,	}	\$44,569 11
Machinery and manufacturing appliances,		
Street mains,		4,232 29
Meters,		1,446 21
Due for gas,		801 05
Gas coal on hand,		222 50
Coke on hand,		6 00
Tar on hand,		30 00
Enrichers on hand,		5 00
Purifying materials on hand,		61 60
Other gas materials on hand,		50 00
Gas fixtures on hand,		136 38
Sundry accounts due the company,		59 15
Cash on hand,		412 32
Total assets, as per books of the company,		\$52,031 61
Profit and loss balance,		1,031 70
		<u>\$53,063 31</u>

LIABILITIES.		
Capital stock,		\$50,000 00
Notes payable,		2,000 00
Amounts due from the company, not included above,		1,063 31
Total liabilities, as per books of the company,		<u>\$53,063 31</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,	\$1,574 22	
Balance of gas manufacturing account,		\$1,832 90
Dividends declared,	1,080 00	
Interest paid,	115 94	
Depreciation,	94 44	
Balance June 30, 1890,		1,031 70
	<u>\$2,864 60</u>	<u>\$2,864 60</u>

HAVERHILL ELECTRIC COMPANY.

ASSETS.		
Real estate,	}	\$111,090 63
Steam plant,		
Electric plant,	}	
Lines, meters, lamps and globes,		
Due for electric light and power,		4,574 03
Sundry accounts due the company,		460 38
Cash on hand,		1,496 10
Total assets, as per books of the company,		<u>\$117,621 14</u>

LIABILITIES.

Capital stock,	\$85,000 00
Notes payable,	19,000 00
Unpaid bills,	3,708 10

Total liabilities, as per books of the company, . .	\$107,708 10
Profit and loss balance,	9,913 04
	<u>\$117,621 14</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$2,953 80
Balance of electric manufacturing account,		11,192 57
Rents,		16 67
Dividends declared,	\$4,250 00	
Balance June 30, 1890,	9,913 04	
	<u>\$14,163 04</u>	<u>\$14,163 03</u>

HAVERHILL GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . \$120,705 27
Machinery and manufacturing appliances,		
Street mains,		22,843 07
Meters,		4,836 16
Due for gas,		6,939 38
Gas coal on hand,		2,141 32
Coke on hand,		270 00
Tar on hand,		1,100 00
Enrichers on hand,		420 00
Purifying material on hand,		360 00
Lungren lamps on hand,		2,778 17
Sundry accounts due the company,		2,032 68
Cash on hand,		3,446 41
Investments,		18,400 00

Total assets, as per books of the company, . . . \$186,272 46

LIABILITIES.

Capital stock,	\$75,000 00
Notes payable,	42,500 00

Total liabilities as per books of the company, . .	\$117,500 00
Profit and loss balance,	68,772 46

\$186,272 46

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$51,333 29
Balance of gas manufacturing account, .		25,630 52
Rents,		540 50
Dividends declared,	\$7,500 00	
Interest paid,	1,231 85	
Balance June 30, 1890,	68,772 46	
	<hr/>	<hr/>
	\$77,504 31	\$77,504 31

HUDSON ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$1,365 77
Electric plant,	6,772 63
Lines, meters, lamps and globes,	8,205 47
Due for electric light and power,	160 00
Cash on hand,	500 77
Stock in treasury,	5,875 00
	<hr/>
Total assets, as per books of the company,	\$22,879 64

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	7,000 00
Unpaid bills,	434 48
	<hr/>
Total liabilities, as per books of the company,	\$22,434 48
Profit and loss balance,	445 16
	<hr/>
	\$22,879 64

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$240 09
Balance of electric manufacturing account, .		966 74
Oil street lamps,		550 00
Dividends declared,	\$486 00	
Construction charged off,	275 77	
Oil street lamps,	550 00	
Balance June 30, 1890,	445 06	
	<hr/>	<hr/>
	\$1,756 83	\$1,756 83

HYDE PARK ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$13,572 06
Steam plant,	30,676 73
Electric plant,	45,195 68
Lines, meters, lamps and globes,	30,308 80
Due for electric light and power,	2,318 40
Fuel on hand,	416 00
Carbons on hand,	132 00
Oil and waste on hand,	56 10
Incandescent lamps on hand,	38 50
Globes on hand,	7 00
Sundry accounts due the company,	492 32
Cash on hand,	592 32
Notes receivable,	161 52
Unexpired insurance,	300 00

Total assets, as per books of the company, . . . \$124,232 43

LIABILITIES.

Capital stock,	\$50,000 00
Bonds issued,	20,000 00
Notes payable,	1,000 00
Unpaid bills,	49,761 87

Total liabilities, as per books of the company, . . \$120,751 87
 Profit and loss balance, 3,480 56

\$124,232 43

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$2,714 29
Balance of electric manufacturing account,		1,272 27
Interest paid,	\$506 00	
Balance June 30, 1890,	3,480 56	
	<u>\$3,986 56</u>	<u>\$3,986 56</u>

IPSWICH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,700 00
Machinery and manufacturing appliances,	2,000 00
Street mains,	5,100 00
Meters,	1,800 00

Due for gas,	\$37 50
Gas coal on hand,.	65 00
Enrichers on hand,	55 00

Total assets, as per books of the company, . . .	\$12,757 50
Profit and loss balance,	15,445 09

\$28,202 59

LIABILITIES.

Capital stock,	\$16,000 00
Bonds issued,	8,000 00
Notes payable,	1,083 00
Unpaid bills,	2,857 59
Interest due but not paid,	262 00

Total liabilities, as per books of the company, . . .	\$28,202 59
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JAMAICA PLAIN GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	\$265,420 25
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Due for gas,		8,594 33
Gas coal on hand,		691 48
Coke on hand,		600 00
Tar on hand,		300 00
Enrichers on hand,		373 95
Other gas materials on hand,		3,429 81
Horses, wagons, etc.,		200 00
Sundry accounts due the company,		2,091 44
Office furniture,		750 00
Cash on hand,		1,983 35

Total assets, as per books of the company, . . .	\$284,434 61
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LIABILITIES.

Capital stock,	\$200,000 00
Notes payable,	32,500 00
Unpaid bills,	171 63
Deposits,	255 00

Total liabilities, as per books of the company, . . .	\$232,926 63
Profit and loss balance,	51,507 98

\$284,434 61

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$51,690 04
Balance of gas manufacturing account, .		21,613 10
Rents,		110 70
Other items of income,		1,947 72
Dividends declared,	\$22,000 00	
Interest paid,	1,503 93	
Other items,	349 65	
Balance June 30, 1890,	51,507 98	
	<hr/>	<hr/>
	\$75,361 56	\$75,361 56

LAWRENCE GAS COMPANY.

ASSETS.

Real estate (gas),	}	\$400,000 00
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Meters (gas),		
Due for gas,		3,934 05
Gas coal on hand,		8,675 61
Coke on hand,		570 00
Tar on hand,		1,416 30
Enrichers on hand,		1,593 16
Purifying materials on hand,		1,356 61
Other gas materials on hand,		9,106 34
Stoves on hand,		357 92
Gas fixtures on hand,		7,474 65
Aqua ammonia,		3,724 49
Steam plant (electric),		13,139 84
Electric plant,		21,084 20
Lines, meters, lamps and globes (electric),		20,984 11
Due for electric light and power,		1,197 57
Fuel on hand (electric light),		1,724 55
Carbons on hand,		84 00
Oil and waste on hand,		66 50
Globes on hand,		49 00
Other electric materials on hand,		75 00
Sundry accounts due the company,		174 65
Gas fixture rental,		60 00
Cash on hand,		15,536 08
Suspense account,		70,715 45

Total assets, as per books of the company, \$583,099 08

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	20,000 00
Deposits,	24 00
<hr/>	
Total liabilities, as per books of the company, . . .	\$520,024 00
Profit and loss balance,	63,075 08
	<hr/>
	\$583,099 08

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$35,525 29
Balance of gas manufacturing account,		31,806 32
Balance of electric manufacturing account,		4,019 45
Premium on new stock sold,		30,112 50
Rents,		1,236 61
Other items of income,		375 99
Dividends declared,	\$39,000 00	
Interest paid,	1,001 08	
Balance June 30, 1890,	63,075 08	
	<hr/>	<hr/>
	\$103,076 16	\$103,076 16

LEE ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$1,500 00
Machinery and manufacturing appliances (gas),	2,000 00
Street mains (gas),	4,000 00
Meters (gas),	685 85
Due for gas,	72 81
Enrichers on hand,	108 17
Other gas materials on hand,	
Stoves on hand,	
Gas fixtures on hand,	
Real estate (electric),	4,485 27
Steam plant (electric) and water power,	2,952 62
Electric plant,	4,899 60
Lines, meters, lamps and globes (electric),	12,777 96
Supply account,	2,874 11
Due for electric light and power,	474 21
Fuel on hand (electric light),	150 00
Oil and waste on hand,	
Incandescent lamps on hand,	
Other electric materials on hand,	
Cash on hand,	474 25

Total assets, as per books of the company, \$37,454 85

LIABILITIES.

Capital stock,	\$20,000 00
Bonds issued,	15,000 00
Unpaid bills,	1,982 42

Total liabilities, as per books of the company, . .	\$36,982 42
Profit and loss balance,	472 43
	<hr/>
	\$37,454 85

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of gas manufacturing account, .	\$19 39	
Balance of electric manufacturing account, .		\$491 82
Balance June 30, 1890,	472 43	
	<hr/>	<hr/>
	\$491 82	\$491 82

LEICESTER ELECTRIC COMPANY.

ASSETS.

Real estate, }		
Steam plant, }		\$4,500 00
Electric plant, }		
Lines, meters, lamps and globes, }		15,650 54
Water wheel,	✓	1,516 82
Due for electric light and power,		311 88
Fuel on hand,		21 00
Oil and waste on hand,		6 15
Other electric materials on hand,		107 50
Sundry accounts due the company,		550 15
Cash on hand,		77 52

Total assets, as per books of the company, . .	\$22,741 56
Profit and loss balance,	5,923 99
	<hr/>
	\$28,665 55

LIABILITIES.

Capital stock,	\$4,000 00
Notes payable,	21,209 45
Unpaid bills,	3,456 10

Total liabilities, as per books of the company, . .	\$26,665 55
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$884 28	
Balance of electric manufacturing account,	546 70	
Interest paid,	540 35	
Construction charged off,	3,912 63	
Other items,	40 03	
Balance June 30, 1890,		\$5,923 99
	<u>\$5,923 99</u>	<u>\$5,923 99</u>

LEOMINSTER ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$10,283 71
Steam plant,	8,132 38
Electric plant,	26,587 41
Lines, meters, lamps and globes,	22,567 22
Patent rights,	10,000 00
Due for electric light and power,	1,045 50
Carbons on hand,	60 00
Oil and waste on hand,	15 00
Wagons, etc.,	59 50
Sundry accounts due the company,	89 60
Office furniture,	33 15
Cash on hand,	333 16
Unexpired insurance,	150 00
Total assets, as per books of the company,	<u>\$79,356 63</u>
Profit and loss balance,	436 92
	<u>\$79,793 55</u>

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	15,000 00
Unpaid bills,	14,793 55
Total liabilities, as per books of the company,	<u>\$79,793 55</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$429 90
Other items,	100 00	
Interest paid,	\$766 82	
Balance June 30, 1890,		436 92
	<u>\$866 82</u>	<u>\$866 82</u>

LEOMINSTER GAS LIGHT COMPANY.

ASSETS.

Real estate, . . . . .	}	. . . . .	\$48,054 47
Machinery and manufacturing appliances,			
Street mains,			
Meters,			1,945 53
Due for gas,			900 90
Gas coal on hand,			45 46
Enrichers on hand,			294 77
Sundry accounts due the company,			41 70
Cash on hand,			746 56

Total assets, as per books of the company, \$52,029 39

LIABILITIES.

Capital stock, \$50,000 00

Total liabilities, as per books of the company, \$50,000 00

Profit and loss balance, 2,029 39

\$52,029 39

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$1,209 95
Balance of gas manufacturing account,		1,362 94
Rents,		78 00
Construction charged off,	\$616 75	
Other items,	4 75	
Balance June 30, 1890,	2,029 39	
	<u>\$2,650 89</u>	<u>\$2,650 89</u>

LEXINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,514 95
Machinery and manufacturing appliances,	21,523 73
Street mains,	6,644 91
Meters,	587 36
Due for gas,	673 08
Gas coal on hand,	13 50
Enrichers on hand,	52 00
Cash on hand,	209 57
Notes receivable,	546 00

Total assets, as per books of the company, \$31,765 10

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	126 13
Unpaid bills,	309 87

Total liabilities, as per books of the company, . . .	\$20,436 00
Profit and loss balance,	11,329 10

\$31,765 10

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$9,830 37
Balance of gas manufacturing account,		1,556 13
Interest received,		10 10
Rents,		10 00
Interest paid,	\$77 50	
Balance June 30, 1890,	11,329 10	
	<hr/>	<hr/>
	\$11,406 60	\$11,406 60

LOWELL ELECTRIC LIGHT CORPORATION.

ASSETS.

Real estate,	\$42,798 61
Steam plant,	34,369 17
Electric plant,	217,424 30
Lines, meters, lamps and globes,	37,450 68
Due for electric light and power,	8,196 26
Fuel on hand,	73 50
Carbons on hand,	315 50
Oil and waste on hand,	12 00
Incandescent lamps on hand,	100 00
Globes on hand,	30 00
Cash on hand,	3,848 13

Total assets, as per books of the company,	\$344,618 15
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LIABILITIES.

Capital stock,	\$195,700 00
Notes payable,	96,000 00
Unpaid bills,	17,571 17

Total liabilities, as per books of the company, . . .	\$309,271 17
Profit and loss balance,	35,346 98

\$344,618 15

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$28,736 73
Balance of electric manufacturing account,		20,384 32
Interest received,		1 00
Other items of income,		299 99
Dividends declared,	\$9,687 00	
Interest paid,	4,388 06	
Balance June 30, 1890,	35,346 98	
	<u>\$49,422 04</u>	<u>\$49,422 04</u>

LOWELL GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Due for gas,			2,270 59
Gas coal on hand,			6,710 12
Coke on hand,			146 00
Enrichers on hand,			70 83
Purifying materials on hand,			90 00
Stoves, engines and fixtures on hand,			12,656 98
Cash on hand,			19,128 78
Investments,			75,000 00
Total assets, as per books of the company,			<u>\$548,801 72</u>

LIABILITIES.

Capital stock,	\$500,000 00
Total liabilities, as per books of the company,	<u>\$500,000 00</u>
Profit and loss balance,	48,801 72
	<u>\$548,801 72</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$26,879 13
Balance of gas manufacturing account,		86,573 91
Rents,		4,441 72
Other items of income,		3,598 28
Dividends declared,	\$60,000 00	
Interest paid,	968 25	
Construction charged off,	11,723 07	
Balance June 30, 1890,	48,801 72	
	<u>\$121,493 04</u>	<u>\$121,393 04</u>

LYNN GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$180,000 00
Machinery and manufacturing appliances (gas), }	
Street mains (gas), }	120,000 00
Due for gas,	16,301 25
Coke on hand,	80 00
Stoves on hand,	19 71
Real estate (electric),	24,122 79
Steam plant (electric),	35,573 38
Electric plant,	38,165 73
Lines, meters, lamps and globes (electric),	68,738 58
Patent rights,	15,000 00
Due for electric light and power,	8,247 03
Oil and waste on hand,	75 00
Incandescent lamps on hand,	351 50
Globes on hand,	36 00
Sundry accounts due the company,	1,116 00
Cash on hand,	1,441 96
Total assets, as per books of the company,	\$509,268 93

LIABILITIES.

Capital stock,	\$375,000 00
Notes payable,	67,500 00
Unpaid bills,	6,542 48
Deposits,	54 27
Reserved fund,	1,000 00

Total liabilities, as per books of the company,	\$450,096 75
Profit and loss balance,	59,172 18

\$509,268 93

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$57,898 75
Balance of gas manufacturing account,		38,434 69
Balance of electric manufacturing account,		31,600 82
Rents,		1,765 00
Dividends declared,	\$26,250 00	
Interest paid,	2,463 93	
Property, purchased of Citizens' Steam and Gas Light Company,	32,096 86	
Depreciation, gas lamps and stoves,	216 29	
Depreciation, electric light plant,	9,500 00	
Balance June 30, 1890,	59,172 18	
	\$129,699 26	\$129,699 26

MALDEN ELECTRIC COMPANY.

ASSETS.

Real estate,	\$10,500 00
Steam plant,	99,450 00
Electric plant, and lamps, }	
Lines, meters and globes,	72,659 56
Patent rights,	55,000 00
Due for electric light and power,	5,998 29
Fuel on hand,	538 09
Carbons on hand,	
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	
Other electric materials on hand,	
Motors on hand,	640 00
Electric fixtures on hand,	
Horses, wagons, etc.,	7,383 61
Sundry accounts due the company,	1,974 92
Cash on hand,	

Total assets, as per books of the company, . . . \$254,144 47

LIABILITIES.

Capital stock,	\$100,000 00
Bonds issued,	100,000 00
Notes payable,	37,609 56
Unpaid bills,	5,020 92

Total liabilities, as per books of the company, . . \$242,630 48
 Profit and loss balance, 11,513 99

\$254,144 47

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$6,088 57
Balance of electric manufacturing account,		19,425 42
Dividends declared,	\$8,000 00	
Interest paid,	6,000 00	
Balance June 30, 1890,	11,513 99	
	<hr/> \$25,513 99	<hr/> \$25,513 99

MALDEN AND MELROSE GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	. . . \$239,529 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Due for gas,		12,455 19
Gas coal on hand,		2,202 99
Oil barrels on hand,		19 00
Tar on hand,		27 00
New holder,		842 00
Purifying materials on hand,		14 00
Pipe extensions,		2,045 84
Gas fixtures on hand,		3,086 25
Sundry accounts due the company,		2,001 41
Cash on hand,		14,988 78
Notes receivable,		8,000 00

Total assets, as per books of the company, . . . \$285,540 26

LIABILITIES.

Capital stock,	\$220,000 00
Unpaid bills,	260 00
Unpaid dividends,	967 50
Contingent fund,	12,625 00

Total liabilities, as per books of the company, . . \$233,852 50
 Profit and loss balance, 51,687 76

\$285,540 26

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$49,319 63
Balance of gas manufacturing account,		30,560 52
Interest received,		246 92
Rents,		125 00
Other items of income,		415 27
Dividends declared,	\$19,800 00	
Interest paid,	67	
Construction charged off,	3,645 41	
Depreciation,	4,913 50	
Other items,	620 00	
Balance June 30, 1890,	51,687 76	
	\$80,667 31	\$80,667 31

MANUFACTURERS' GAS LIGHT COMPANY (FALL RIVER).

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances, .		
Street mains,		
Meters,		
Due for gas,		1,018 68
Gas coal on hand,		180 00
Coke on hand,		49 00
Tar on hand,		12 00
Enrichers on hand,		320 00
Lamps on hand,		80 00
Cash on hand,		1,268 22
Total assets, as per books of the company,		\$52,732 89

LIABILITIES.

Capital stock,	\$50,000 00
Total liabilities, as per books of the company,	\$50,000 00
Profit and loss balance (if surplus),	2,732 89
	<u>\$52,732 89</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$2,866 11
Balance of gas manufacturing account,		4,856 69
Rents,		70 00
Dividends declared,	\$5,000 00	
Interest paid,	59 91	
Balance June 30, 1890,	2,732 89	
	\$7,792 80	\$7,792 80

MARBLEHEAD GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$5,491 09	
Machinery and manufacturing appliances, .	}	24,796 68
Street mains,		
Meters,		
Due for gas,		773 54
Gas coal on hand,		1,009 65
Tar on hand,		24 00
Other gas materials on hand,		175 94
Stoves on hand,		103 76
Sundry accounts due the company,		120 01
Office furniture,		200 00

Cash on hand,	\$159 14
Investments,	100 00

Total assets, as per books of the company, . . .	\$34,561 06
Profit and loss balance,	8,698 97

\$43,260 03

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	3,000 00
Unpaid bills,	260 03

Total liabilities, as per books of the company, . . .	\$43,260 03
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$10,138 26	
Balance of gas manufacturing account,		\$1,368 70
Interest received,		6 00
Rents,		196 85
Other items of income,		60 65
Interest paid,	192 91	
Balance June 30, 1890,		8,698 97
	<hr/>	<hr/>
	\$10,331 17	\$10,331 17

MARLBOROUGH ELECTRIC COMPANY.

ASSETS.

Real estate,	\$3,682 13
Steam plant,	10,057 40
Electric plant,	27,193 89
Lines, meters, lamps and globes,	17,725 52
Due for electric light and power,	597 30
Fuel on hand,	26 00
Carbons on hand,	48 50
Oil and waste on hand,	40 00
Incandescent lamps on hand,	260 80
Globes on hand,	9 46
Sundry accounts due the company,	3 38
Cash on hand,	577 39

Total assets, as per books of the company, . . .	\$60,221 77
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LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	19,700 00
Notes payable,	5,000 00
Unpaid bills,	1,788 18

Total liabilities, as per books of the company, . . .	\$56,488 18
Profit and loss balance,	3,733 59

\$60,221 77

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$3,178 68
Balance of electric manufacturing account,		3,053 28
Interest paid,	\$1,613 37	
Discount on bonds,	885 00	
Balance June 30, 1890,	3,733 59	
	<u>\$6,231 96</u>	<u>\$6,231 96</u>

MARLBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$5,590 00
Machinery and manufacturing appliances,	53,507 51
Street mains,	7,664 38
Meters,	1,203 70
Due for gas,	1,501 56
Gas coal on hand,	224 59
Tar on hand,	127 00
Purifying materials on hand,	91 40
Other gas materials on hand,	103 11
Stoves on hand,	1,163 14
Gas fixtures on hand, }	
Sundry accounts due the company,	161 58
Cash on hand,	3,843 94

Total assets, as per books of the company, \$75,181 91

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	20 15
Unpaid bills,	645 10

Total liabilities, as per books of the company, \$50,665 25

Profit and loss balance, 24,516 66

\$75,181 91

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$21,602 14
Balance of gas manufacturing account,		2,872 69
Other items of income,		95 28
Interest paid,	\$2 20	
Other items,	51 25	
Balance June 30, 1890,	24,516 66	
	<u>\$24,570 11</u>	<u>\$24,570 11</u>

MIDDLEBOROUGH ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.	
Real estate,	\$12,465 71
Water power,	25,891 49
Electric plant,	12,209 99
Lines, meters, lamps and globes,	18,183 63
Due for electric light and power,	371 43
Carbons on hand,	141 25
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	
Other electric materials on hand,	
Motors on hand,	141 25
Electric fixtures on hand,	
Total assets, as per books of the company,	\$69,510 09
Profit and loss balance,	489 91
	<hr/>
	\$70,000 00

LIABILITIES.	
Capital stock,	\$40,000 00
Bonds issued,	30,000 00
Total liabilities, as per books of the company,	<hr/> \$70,000 00

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$260 09
Interest paid,	\$750 00	
Balance June 30, 1890,		489 91
	<hr/> \$750 00	<hr/> \$750 00

MILFORD ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.	
Real estate,	\$51,833 64
Steam plant,	
Electric plant,	
Lines, meters, lamps and globes,	
Due for electric light and power,	1,933 22
Carbons on hand,	1,812 52
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	
Cash on hand,	755 10
Treasury stock,	500 00
Unexpired interest, insurance and taxes,	409 06
Total assets, as per books of the company,	<hr/> \$57,242 54

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	14,688 13
Unpaid bills,	1,534 52
Total liabilities, as per books of the company, . .	\$56,222 65
Profit and loss balance,	1,019 89
	<u>\$57,242 54</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,.	\$1,182 87	
Balance of electric manufacturing account,		\$2,966 77
Interest paid,	764 01	
Balance June 30, 1890,.	1,019 89	
	<u>\$2,966 77</u>	<u>\$2,996 77</u>

MILFORD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,450 00
Machinery and manufacturing appliances,	60,161 50
Street mains,	30,963 61
Meters,	5,784 78
Due for gas,	1,306 61
Gas coal on hand,	1,566 00
Coke on hand,	81 25
Tar on hand,	383 25
Enrichers on hand,	675 50
Purifying materials on hand,	29 00
Other gas materials on hand,	415 75
Stoves on hand,	90 75
Gas fixtures on hand,	3,206 02
Construction,	4,205 11
Sundry accounts due the company,	376 61
Office furniture,	100 00
Cash on hand,	5,931 87
Total assets, as per books of the company,	<u>\$118,727 61</u>

LIABILITIES.

Capital stock,	\$72,300 00
Unpaid bills,	1,144 82
Unpaid dividends,	3,615 00
Depreciation fund,	33,800 00
Total liabilities, as per books of the company, . .	\$110,859 82
Profit and loss balance,	7,867 79
	<u>\$118,727 61</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$34,867 94
Balance of gas manufacturing account,		9,332 30
Interest received,		530 00
From reserve fund,		4,700 00
Dividends declared,	\$7,615 00	
Interest paid,	147 45	
To depreciation fund,	33,800 00	
Balance June 30, 1890,	7,867 79	
	<u>\$49,430 24</u>	<u>\$49,430 24</u>

MILLBURY ELECTRIC COMPANY.

ASSETS.

Real estate,	\$3,905 40
Steam plant,	6,428 78
Electric plant,	19,039 03
Lines, meters, lamps and globes, }	
Due for electric light and power,	717 92
Fuel on hand,	100 00
Carbons on hand,	953 18
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	
Other electric materials on hand,	
Motors on hand,	
Electric fixtures on hand,	
Unexpired taxes,	131 25
Cash on hand,	1,382 99
Total assets, as per books of the company,	<u>\$32,658 55</u>

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	16,000 00
Unpaid bills,	625 00
Reserved fund,	666 23
Total liabilities, as per books of the company,	<u>\$32,291 23</u>
Profit and loss balance,	367 32
	<u>\$32,658 55</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$767 32
Interest paid,	\$400 00	
Balance June 30, 1890,	367 32	
	<u>\$767 32</u>	<u>\$767 32</u>

MILLER'S RIVER GAS LIGHT COMPANY (ATHOL).

ASSETS.

Real estate (gas),	}	\$63,410 66
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Meters (gas),		
Due for gas,		391 62
Gas coal on hand,		18 00
Other gas materials on hand,		160 00
Real estate (electric),	}	21,359 89
Steam plant (electric),		
Electric plant,		
Lines, meters, lamps and globes (electric),		
Due for electric light and power,		173 75
Fuel on hand (electric light),		50 00
Sundry accounts due the company,		589 29
Cash on hand,		41 29
Total assets, as per books of the company,		\$86,194 50

LIABILITIES.

Capital stock,	. . . . .	\$40,000 00
Bonds issued,	. . . . .	20,000 00
Notes payable,	. . . . .	7,950 53
Electric bonds assumed,	. . . . .	16,000 00
Amounts due from the company, not included above,	.	1,658 27
		<hr/>
Total liabilities, as per books of the company,	. .	\$85,608 80
Profit and loss balance,	. . . . .	585 70
		<hr/>
		\$86,194 50

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$1,028 44
Balance of gas manufacturing account,		1,305 53
Balance of electric manufacturing account,	\$654 45	
Other items of income,		8 80
Interest paid,	1,068 23	
Other items,	34 39	
Balance June 30, 1890,	585 70	
		<hr/>
		\$2,342 77
		<hr/>
		\$2,342 77

NANTUCKET ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$2,000 00
Steam plant,	11,220 00
Electric plant,	41,175 40
Lines, meters, lamps and globes, }	
Fuel on hand,	234 90
Carbons on hand,	22 00
Oil and waste on hand,	36 68
Sundry accounts due the company,	375 85
Office furniture,	62 65
Cash on hand,	408 00

Total assets, as per books of the company,	\$55,472 83
Profit and loss balance,	242 07
	<u>\$55,714 90</u>

LIABILITIES.

Capital stock,	\$25,000 00
Bonds issued,	20,000 00
Notes payable,	3,450 00
Unpaid bills,	6,614 90
Deposits,	408 00
Interest due, but not paid,	300 00

Total liabilities, as per books of the company,	<u>\$55,714 90</u>
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of electric manufacturing account,		\$57 93
Interest paid,	\$300 00	
Balance June 30, 1890,		242 07
	<u>\$300 00</u>	<u>\$300 00</u>

NANTUCKET GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,000 00
Machinery and manufacturing appliances,	20,000 00
Street mains,	9,540 53
Meters,	4,000 00
Due for gas,	825 06
Gas coal on hand,	207 20
Coke on hand,	20 00
Tar on hand,	100 00

Purifying materials on hand,	\$3 00
Cash on hand,	1,509 11
Notes receivable,	2,000 00
Investments,	368 00

Total assets, as per books of the company, . . . \$41,572 90

LIABILITIES.

Capital stock,	\$36,000 00
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Total liabilities, as per books of the company, . . \$36,000 00

Profit and loss balance, 5,572 90

\$41,572 90

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$4,564 82
Balance of gas manufacturing account,		968 90
Interest received,		39 18
Balance June 30, 1890,	\$5,572 90	
	\$5,572 90	\$5,572 90

NATICK ELECTRIC COMPANY.

ASSETS.

Real estate,	\$16,432 13
Steam plant,	17,762 44
Electric plant,	20,503 69
Lines, meters, lamps and globes,	24,230 63
Due for electric light and power,	1,448 34
Fuel on hand,	280 20
Carbons on hand,	20 00
Oil and waste on hand,	17 75
Incandescent lamps on hand,	225 00
Cash on hand,	190 58
For purchase old plant,	69,942 83

Total assets, as per books of the company, . . . \$151,053 59

Profit and loss balance, 2,898 51

\$153,952 10

LIABILITIES.

Capital stock,	\$40,000 00
Bonds issued,	30,000 00
Notes payable,	16,000 00
Unpaid bills,	978 51
Amounts due from the company, not included above,	66,973 59

Total liabilities, as per books of the company, . . . \$153,952 10

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,	\$1,218 51	
Interest paid,	1,680 00	
Balance June 30, 1890,		\$2,898 51
	<hr/>	<hr/>
	\$2,898 51	\$2,898 51

NATICK GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$16,670 38
Machinery and manufacturing appliances, }	22,255 07
Street mains,	
Meters,	
Due for gas,	1,547 30
Gas coal on hand,	422 72
Coke on hand,	9 00
Tar on hand,	154 00
Enrichers on hand,	12 95
Other gas materials on hand,	243 17
Stoves on hand,	
Gas fixtures on hand, }	715 88
Total assets, as per books of the company,	<hr/>
	\$42,030 47

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	8,500 00
Unpaid bills,	513 37
Total liabilities, as per books of the company,	<hr/>
	\$29,013 37
Profit and loss balance,	13,017 10
	<hr/>
	\$42,030 47

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$13,420 68
Balance of gas manufacturing account,		1,648 59
Dividends declared,	\$1,600 00	
Interest paid,	435 37	
Depreciation,	16 80	
Balance June 30, 1890,	13,017 10	
	<hr/>	<hr/>
	\$15,069 27	\$15,069 27

NEW BEDFORD GAS LIGHT COMPANY.

ASSETS.

Real estate (gas), . . . . .	}	. . . . .	\$161,164 08
Machinery and manufacturing appliances (gas),			
Street mains (gas),			125,991 38
Meters (gas) and services,			35,476 08
Due for gas,			12,037 30
Gas coal on hand,			3,409 90
Coke on hand,			1,790 76
Tar on hand,			1,037 60
Purifying materials on hand,			1,069 00
Other gas materials and fixtures on hand,			13,364 24
Stoves on hand,			13,498 90
Real estate (electric), . . . . .	}	. . . . .	424,556 27
Steam plant (electric),			
Electric plant,			
Lines, meters, lamps and globes (electric),			
Patent rights,			
Due for electric light and power,			6,741 36
Fuel on hand (electric light), . . . . .	}	. . . . .	8,859 88
Carbons on hand,			
Oil and waste on hand,			
Incandescent lamps on hand,			
Globes on hand,			
Other electric materials on hand,			
Motors on hand,			
Electric fixtures on hand,			
Sundry accounts due the company,			4,552 53
Office furniture,			1,690 05
Cash on hand,			9,360 60
Street lighting, lanterns,			2,800 00
Total assets, as per books of the company,			\$827,399 93

LIABILITIES.

Capital stock,	.	.	.	.	.	.	.	.	\$550,000	00
Notes payable,	.	.	.	.	.	.	.	.	141,300	00
Deposits,	.	.	.	.	.	.	.	.	151	00
Reserved fund,	.	.	.	.	.	.	.	.	41,949	46
Insurance reserve,	.	.	.	.	.	.	.	.	2,396	49
Premium account,	.	.	.	.	.	.	.	.	74,280	26
										<hr/>	
Total liabilities, as per books of the company,	.	.	.	.	.	.	.	.	\$810,077	21
Profit and loss balance,	.	.	.	.	.	.	.	.	17,322	72
										<hr/>	
										\$827,399	93

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$45,217 37
Balance of gas manufacturing account,		23,226 37
Balance of electric manufacturing account,		6,704 28
Balance gas inventory,		2,677 30
Balance electric inventory,		5,727 10
Other items of income,		45 00
Dividends declared,	\$30,000 00	
Interest paid,	6,787 69	
Edison department,		2,635 74
To premium account,	74,280 26	
Premium on stock sold,		42,157 51
Balance June 30, 1890,	17,322 72	
	<u>\$128,390 67</u>	<u>\$128,380 67</u>

NEWBURYPORT GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$1,132 43
Machinery and manufacturing appliances (gas),	75,000 00
Street mains (gas),	5,039 14
Meters (gas),	1,415 56
Due for gas,	2,708 03
Gas coal on hand,	2,525 85
Coke on hand,	48 00
Tar on hand,	96 45
Enrichers,	
Purifying materials on hand, }	270 10
Other gas materials on hand,	125 50
Gas fixtures on hand,	96 65
Real estate (electric), }	
Steam plant (electric), }	60,000 00
Electric plant,	
Lines, meters, lamps and globes (electric),	11,741 26
Due for electric light and power,	2,708 12
Fuel on hand (electric light),	225 50
Carbons on hand,	52 00
Oil and waste on hand,	18 45
Incandescent lamps on hand,	316 70
Globes on hand,	63 75
Other electric materials on hand,	360 50
Motors on hand,	1,202 75
Horses, wagons, etc.,	547 00
Sundry accounts due the company,	618 68
Office furniture,	46 22
Cash on hand,	1,638 61

Total assets, as per books of the company, \$167,997 25

LIABILITIES.

Capital stock,	\$140,000 00
Notes payable,	16,000 00
Unpaid bills,	280 60
Unpaid dividends,	834 50
<hr/>	
Total liabilities, as per books of the company, . . .	\$157,115 10
Profit and loss balance,	10,882 15
<hr/>	
	\$167,997 25

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$5,169 07
Balance of gas manufacturing account,		5,897 71
Balance of electric manufacturing account,		2,929 62
Balance from electric ledger,		4,476 67
Rents,		100 00
Other items of income,		2 00
Dividends declared,	\$6,600 00	
Interest paid,	575 20	
Other items,	517 72	
Balance June 30, 1890,	10,882 15	
<hr/>		
	\$18,575 07	\$18,575 07

NEWTON AND WATERTOWN GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$73,000 00
Machinery and manufacturing appliances,	90,383 20
Street mains (gas),	146,427 54
Meters (gas),	14,520 82
Due for gas,	18,770 36
Gas coal on hand,	4,381 45
Coke on hand,	150 00
Tar on hand,	1,680 00
Purifying materials on hand,	50 00
Other gas materials on hand,	890 07
Stoves on hand,	433 78
Gas fixtures on hand,	1,500 00
Real estate (electric),	20,639 36
Steam plant (electric),	25,965 40
Electric plant,	25,009 61
Lines, meters, lamps and globes (electric),	66,955 83
Due for electric light and power,	3,050 96
Oil and waste on hand,	82 00
Incandescent lamps on hand,	123 20
Other electric materials on hand,	2,987 28

Horses, wagons, etc.,	\$318 00
Sundry accounts due the company,	2,666 03
Office furniture,	447 65
Notes receivable,	441 88
Investments,	10,395 27
Total assets, as per books of the company,	<u>\$511,269 69</u>

LIABILITIES.

Capital stock,	\$200,000 00
Bonds issued,	69,000 00
Notes payable,	81,586 66
Unpaid bills,	6,846 36
Deposits,	50 00
Unpaid dividends,	716 00
Contingent fund,	25,000 00
Total liabilities, as per books of the company,	<u>\$383,199 02</u>
Profit and loss balance,	128,070 67
	<u>\$511,269 69</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$109,776 83
Balance of gas manufacturing account,		32,971 22
Balance of electric manufacturing account,		4,384 24
Interest received,		243 43
Rents,		1,552 50
Other items of income,		2,091 26
Dividends declared,	\$16,000 00	
Interest paid,	5,922 95	
Depreciation,	855 20	
Other items,	170 66	
Balance June 30, 1890,	128,070 67	
	<u>\$151,019 48</u>	<u>\$151,019 48</u>

NORTH ADAMS ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Steam plant,	\$1,500 00
Electric plant,	6,000 00
Lines, meters, lamps and globes,	7,000 00
Due for electric light and power,	687 41
Carbons on hand,	25 50
Incandescent lamps on hand,	300 00
Globes on hand,	34 35
Total assets, as per books of the company,	<u>\$15,547 26</u>

LIABILITIES.

Capital stock,	\$7,500 00
Notes payable,	7,000 00
Total liabilities, as per books of the company, . . .	\$14,500 00
Profit and loss balance,	1,047 26
	<u>\$15,547 26</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$3,159 89
Balance of electric manufacturing account,		1,555 70
Other items of income,		473 83
Interest paid,	\$213 20	
Depreciation,	3,928 96	
Balance June 30, 1890,	1,047 26	
	<u>\$5,180 42</u>	<u>\$5,180 42</u>

NORTH ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	\$60,000 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		4,405 25
Due for gas,		2,724 88
Gas coal on hand,		396 00
Coke on hand,		24 60
Tar on hand,		146 50
Enrichers on hand,		144 00
Other gas materials on hand,		50 00
Stoves on hand,	}	1,661 43
Gas fixtures on hand,		
Horses, wagon, etc.,		593 50
Office furniture,		690 50
Cash on hand,		1,217 50
Investments,		21,746 09

Total assets, as per books of the company, \$93,800 25

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	18,000 00
Total liabilities, as per books of the company, . . .	\$68,000 00
Profit and loss balance,	25,800 25
	<u>\$93,800 25</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$19,407 87
Balance of gas manufacturing account,		11,072 24
Dividends declared,	\$4,000 00	
Interest paid,	679 86	
Balance June 30, 1890,	25,800 25	
	<u>\$30,480 11</u>	<u>\$30,480 11</u>

NORTHAMPTON ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$14,108 43
Steam plant, }	38,063 20
Electric plant, }	
Lines, lamps and globes,	28,856 95
Tools,	80 38
Due for electric light and power,	1,371 37
Fuel on hand,	139 50
Carbons on hand,	40 00
Oil and waste on hand,	25 00
Incandescent lamps on hand,	236 32
Horses, wagons, etc.,	285 20
Office furniture,	101 80
Cash on hand,	2,235 88
Insurance,	150 00
Total assets, as per books of the company,	<u>\$85,694 03</u>

LIABILITIES.

Capital stock,	\$58,700 00
Bonds issued,	7,000 00
Notes payable,	17,318 35
Unpaid bills,	136 93
Total liabilities, as per books of the company,	<u>\$83,155 28</u>
Profit and loss balance,	2,538 75
	<u>\$85,694 03</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$2,310 02
Balance of electric manufacturing account,		3,771 03
Rents,		307 93
Other items of income,		83 24
Dividends declared,	\$2,935 00	
Interest paid,	998 47	
Balance June 30, 1890,	2,538 75	
	<u>\$6,472 22</u>	<u>\$6,472 22</u>

NORTHAMPTON GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$24,900 00
Machinery and manufacturing appliances,	3,000 00
Street mains,	20,000 00
Due for gas,	1,713 97
Gas coal on hand,	227 04
Coke on hand,	150 00
Tar on hand,	287 35
Enrichers on hand,	170 68
Purifying materials on hand,	70 00
Other gas materials on hand,	1,055 45
Stoves on hand,	68 30
Spent lime on hand,	20 00
Sundry accounts due the company,	669 79
Cash on hand,	6,126 08
Investments,	3,250 00
Total assets, as per books of the company,	<u>\$61,708 66</u>

LIABILITIES.	
Capital stock,	\$50,000 00
Reserved fund,	5,418 50
Total liabilities, as per books of the company,	<u>\$55,418 50</u>
Profit and loss balance,	6,290 16
	<u>\$61,708 66</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$5,215 61
Balance of gas manufacturing account,		5,264 63
Interest received,		417 22
Rents,		225 00
Dividends declared,	\$4,000 00	
Construction charged off,	598 26	
Other items,	234 04	
Balance June 30, 1890,	6,290 16	
	<u>\$11,122 46</u>	<u>\$11,122 46</u>

NORTH ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$47,474 72
Machinery and manufacturing appliances,	28,550 20
Street mains,	30,613 68
Meters,	5,259 38
Due for gas,	1,486 54

Gas coal on hand,	\$1,835 00
Coke on hand,	105 70
Tar on hand,	8 75
Purifying materials on hand,	107 10
Other gas materials on hand,	215 63
Stoves on hand,	403 07
Gas fixtures on hand,	863 20
Sundry accounts due the company,	173 44
Office furniture,	262 50
Cash on hand,	10,779 96

Total assets, as per books of the company, . . . \$128,138 87

LIABILITIES.

Capital stock,	\$68,100 00
Bonds issued,	47,670 00
Unpaid bills,	101 17
Unpaid dividends,	2,043 00
Interest due, but not paid,	715 05

Total liabilities, as per books of the company, . . \$118,629 22
Profit and loss balance, 9,509 65

\$128,138 87

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$5,829 90
Balance of manufacturing account,		12,221 89
Interest received,		397 43
Rents,		190 62
Other items of income,		143 90
Dividends declared,	\$4,086 00	
Interest paid,	4,116 83	
Depreciation,	1,071 26	
Balance June 30, 1890,	9,509 65	
	<u>\$18,783 74</u>	<u>\$18,783 74</u>

NORTH ATTLEBOROUGH STEAM AND ELECTRIC
COMPANY.

ASSETS.

Real estate,	\$18,000 00
Steam plant,	} 93,370 92
Electric plant,	
Lines, meters, lamps and globes,	
Due for electric light and power,	6,812 90
Fuel on hand,	920 00
Carbons on hand,	50 00
Oil and waste on hand,	100 00

Motors on hand,	\$2,798 90
Electric fixtures on hand,	100 00
Sundry accounts due the company,	891 04
Office furniture,	68 46
Cash on hand,	42 53
Notes receivable,	25 00

Total assets, as per books of the company, . . . \$123,179 75

LIABILITIES.

Capital stock,	\$61,600 00
Bonds issued,	30,000 00
Notes payable,	11,826 06
Unpaid bills,	11,600 58

Total liabilities, as per books of the company, . . \$115,026 64
 Profit and loss balance, 8,153 11

\$123,179 75

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$5,411 82
Balance of electric manufacturing account,		3,976 41
Rents,		558 88
Interest paid,	\$1,794 00	
Balance June 30, 1890,	8,153 11	
	\$9,947 11	\$9,947 11

NORTH SHORE ELECTRIC COMPANY (REVERE).

ASSETS.

Real estate,	\$14,456 88
Steam plant,	37,524 03
Electric plant,	72,680 98
Lines, meters, lamps and globes,	82,757 28
Patent rights,	25,000 00
Due for electric light and power,	2,856 05
Fuel on hand,	71 50
Carbons on hand,	40 00
Oil and waste on hand,	34 05
Incandescent lamps on hand,	179 85
Globes on hand,	10 00
Cash on hand,	137 65
Unexpired insurance and taxes,	385 53

Total assets, as per books of the company, . . . \$236,132 80
 Profit and loss balance, 481 17

\$236,614 97

LIABILITIES.	
Capital stock,	\$80,000 00
Bonds issued,	75,000 00
Notes payable,	4,144 89
Unpaid bills,	77,470 08
<hr/>	
Total liabilities, as per books of the company, . . .	\$236,614 97

PROFIT AND LOSS ACCOUNT.		
	Dr.	Cr.
Balance June 30, 1889,		\$1,985 10
Balance of electric manufacturing account,		2,175 41
Interest paid,	\$4,641 68	
Balance June 30, 1890,		481 17
	<hr/>	<hr/>
	\$4,641 68	\$4,641 68

NORWOOD GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$3,000 00
Machinery and manufacturing appliances, }	8,000 00
Street mains,	
Meters,	834 91
Due for gas,	374 20
Gas coal on hand,	52 45
Cash on hand,	671 26
<hr/>	
Total assets, as per books of the company,	\$12,932 82

LIABILITIES.	
Capital stock,	\$12,000 00
<hr/>	
Total liabilities, as per books of the company,	\$12,000 00
Profit and loss balance,	932 82
<hr/>	
	\$12,932 82

PROFIT AND LOSS ACCOUNT.		
	Dr.	Cr.
Balance June 30, 1889,		\$2,472 80
Balance of gas manufacturing account, .	\$1,539 98	
Balance June 30, 1890,	932 82	
	<hr/>	<hr/>
	\$2,472 80	\$2,472 80

ORANGE ELECTRIC LIGHT COMPANY.

ASSETS.	
Real estate,	\$1,600 00
Steam plant,	6,000 00
Electric plant,	7,700 00
Lines, meters, lamps and globes,	13,291 99

Due for electric light and power,	\$456 17
Fuel on hand,	240 75
Carbons on hand,	38 00
Oil and waste on hand,	16 75
Incandescent lamps on hand,	86 25
Globes on hand,	2 25
Other electric materials on hand,	459 80
Sundry accounts due the company,	4,448 01
Cash on hand,	419 49

Total assets, as per books of the company,	\$34,759 46
Profit and loss balance,	5,635 45

\$40,394 91

LIABILITIES.

Capital stock,	\$25,000 00
Bonds issued,	15,000 00
Unpaid bills,	394 91

Total liabilities, as per books of the company,	\$40,394 91
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PALMER ELECTRIC COMPANY.

ASSETS.

Gas fixtures on hand,	\$6,297 06
Real estate,	9,378 34
Steam plant,	16,970 50
Electric plant,	19,057 81
Lines, meters, lamps and globes,	6,000 00
Plant rights,	1,800 04
Due for electric light and power,	74 25
Fuel on hand,	21 00
Carbons on hand,	56 00
Oil and waste on hand,	164 75
Cash on hand,	29 87

Total assets, as per books of the company,	\$59,849 62
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LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	20,000 00
Notes payable,	700 00
Unpaid bills,	8,073 92

Total liabilities, as per books of the company,	\$58,773 92
Profit and loss balance,	1,075 70

\$59,849 62

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$394 96
Balance of electric manufacturing account, .		1,882 14
Interest paid,	\$1,201 40	
Balance June 30, 1890,	1,075 70	
	<u>\$2,277 10</u>	<u>\$2,277 10</u>

PEOPLE'S ELECTRIC COMPANY (EASTHAMPTON).

ASSETS.

Electric plant,	}	
Lines, meters, lamps and globes,		\$5,350 00
Due for electric light and power,		482 30
Electric materials on hand,		250 00
Cash on hand,		197 82
Total assets, as per books of the company,		<u>\$6,230 12</u>

LIABILITIES.

Capital stock,	\$5,000 00
Unpaid bills,	780 02
Total liabilities, as per books of the company,	<u>\$5,780 02</u>
Profit and loss balance,	450 10
	<u>\$6,230 12</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$344 99
Balance of electric manufacturing account, .		255 11
Dividends declared,	\$150 00	
Balance June 30, 1890,	450 10	
	<u>\$600 10</u>	<u>\$600 10</u>

PITTSFIELD COAL GAS COMPANY.

ASSETS.

Real estate,	\$22,500 00
Machinery and manufacturing appliances,	14,350 00
Street mains,	19,110 00
Meters,	6,540 00
Due for gas,	3,908 84
Coke on hand,	100 00
Tar on hand,	60 00
Enrichers on hand,	337 50
Purifying materials on hand,	25 00

Stoves on hand,	\$25 00
Sundry accounts due the company,	355 49
Cash on hand,	16,756 74
Notes receivable,	27,825 14
Investments,	3,550 00

Total assets, as per books of the company, . . . \$115,443 71

LIABILITIES.

Capital stock,	\$62,500 00
Unpaid bills,	1,625 00
Reserved fund,	40,000 00

Total liabilities, as per books of the company, . . \$105,625 00
 Profit and loss balance, 9,718 71

\$115,443 71

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$5,675 10
Balance of gas manufacturing account,		9,070 72
Interest received,		2,298 20
Rents,		174 69
Dividends declared,	\$7,500 00	
Balance June 30, 1890,	9,718 71	
	\$17,218 71	\$17,218 71

PITTSFIELD ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$842 29
Electric plant,	9,678 76
Lines, meters, lamps and globes,	14,124 46
Due for electric light and power,	1,918 42
Cash on hand,	209 04

Total assets, as per books of the company, . . . \$26,772 97

LIABILITIES.

Capital stock,	\$5,000 00
Notes payable,	8,600 00
Unpaid bills,	584 26

Total liabilities, as per books of the company, . . \$14,184 26
 Profit and loss balance, 12,588 71

\$26,772 97

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$10,477 78
Balance of electric manufacturing account, .		3,406 61
Dividends declared,	\$500 00	
Interest paid,	575 14	
Depreciation,	189 96	
Other items,	30 58	
Balance June 30, 1890,	12,588 71	
	<u>\$13,884 39</u>	<u>\$13,884 39</u>

PITTSFIELD ILLUMINATING COMPANY.

ASSETS.

Real estate,	\$12,500 00
Electric plant,	15,000 00
Lines, meters, lamps and globes,	12,425 90
Fuel on hand,	106 79
Oil and waste on hand,	57 00
Incandescent lamps on hand,	46 29
Other electric materials on hand,	190 00
Sundry supplies,	518 56
Sundry accounts due the company,	2,148 78
Tools,	123 75
Cash on hand,	67 39
Total assets, as per books of the company,	<u>\$43,184 46</u>
Profit and loss balance,	422 86
	<u>\$43,607 32</u>

LIABILITIES.

Capital stock,	\$25,000 00
Notes payable,	15,736 46
Unpaid bills,	2,870 86
	<u>\$43,607 32</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$863 26
Balance of electric manufacturing account, .		1,109 30
Other items of income,		4 94
Interest paid,	\$1,323 00	
Old bills paid,	717 25	
Bad debts charged off,	349 49	
Other items,	10 62	
Balance June 30, 1890,		422 86
	<u>\$2,400 36</u>	<u>\$2,400 36</u>

PLYMOUTH ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$6,381 51
Steam plant,	21,337 14
Electric plant,	31,713 78
Lines, meters, lamps and globes,	22,594 06
Patent rights,	9,500 00
Due for electric light and power,	3,057 05
Carbons on hand,	17 00
Oil and waste on hand,	82 75
Incandescent lamps on hand,	300 00
Globes on hand,	10 00
Cash on hand,	229 10

Total assets, as per books of the company, . . . \$95,222 39

LIABILITIES.

Capital stock,	\$40,000 00
Bonds issued,	30,000 00
Notes payable,	1,500 00
Unpaid bills,	23,374 25

Total liabilities, as per books of the company, . . \$94,874 25
 Profit and loss balance, 348 14

\$95,222 39

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$1,301 14
Interest paid,	\$953 00	
Balance June 30, 1890,	348 14	
	<u>\$1,301 14</u>	<u>\$1,301 14</u>

PLYMOUTH GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		\$40,000 00
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Due for gas,			1,926 48
Gas coal on hand,			120 96
Coke on hand,			18 00
Tar on hand,			150 00
Enrichers on hand,			4 00
Purifying materials on hand,			35 15
Other gas materials on hand,			95 41

Stoves on hand,	\$73 56
Gas fixtures on hand,	1,724 39
Sundry accounts due the company,	278 94
Notes receivable,	667 62

Total assets, as per books of the company, . . . \$45,094 51

LIABILITIES.

Capital stock,	\$40,000 00
Unpaid bills,	500 00
Unpaid dividends,	66 50
Amounts due from the company, not included above,	259 74

Total liabilities, as per books of the company, . . \$40,826 24
 Profit and loss balance, 4,268 27

\$45,094 51

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$4,856 28
Balance of gas manufacturing account,		2,311 99
Dividends declared,	\$2,400 00	
Depreciation,	500 00	
Balance June 30, 1890,	4,268 27	
	<u>\$7,168 27</u>	<u>\$7,168 27</u>

QUINCY ELECTRIC LIGHT & POWER COMPANY.

ASSETS.

Real estate,	\$9,588 14
Steam plant,	} 65,553 77
Electric plant,	
Lines, meters, lamps and globes,	} 1,452 76
Due for electric light and power,	
Fuel on hand,	350 00
Carbons on hand,	10 00
Oil and waste on hand,	59 76
Incandescent lamps on hand,	90 20
Globes on hand,	39 00
Other electric materials on hand,	2,287 99
Cash on hand,	174 80

Total assets, as per books of the company, . . . \$79,606 42

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	27,491 36
Unpaid dividends,	185 00

Total liabilities, as per books of the company, . . \$77,626 36
 Profit and loss balance, 1,980 06

\$79,606 42

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$287 74
Balance of electric manufacturing account,		3,225 49
Interest received,		103 00
Rents,		75 00
Interest paid,	\$1,561 17	
Other items,	150 00	
Balance June 30, 1890,	1,980 06	
	<hr/>	<hr/>
	\$3,691 23	\$3,691 23

ROXBURY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$116,365 91
Machinery and manufacturing appliances,	304,563 30
Street mains,	312,131 07
Meters,	73,970 96
Due for gas,	27,190 81
Gas coal on hand,	6,031 37
Coke on hand,	10,311 00
Tar on hand,	994 80
Enrichers on hand,	19 50
Purifying materials on hand,	539 68
Other gas materials on hand,	5,983 83
Gas on hand,	949 52
Patent rights,	50,000 00
Sundry accounts due the company,	3,153 61
Cash on hand,	43,700 18
Notes receivable,	75,000 00

Total assets, as per books of the company, . . . \$1,030,905 54

LIABILITIES.

Capital stock,	\$600,000 00
Unpaid bills,	1,572 53
Deposits,	4,090 00
Amounts due from the company, not included above,	1,762 53

Total liabilities, as per books of the company, . . . \$607,425 06
 Profit and loss balance, 423,480 48

\$1,030,905 54

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$308,575 55
Balance gas manufacturing account,		86,994 21
Interest received,		4,353 13
Rents,		1,664 89
Amounts debited to profit and loss prior to Jan. 1, 1889, and credited to construction June 30, 1890, as follows, viz.:—		
Works improvements,		11,252 35
Mains,		55,970 93
Services,		9,191 86
Meters,		20,477 56
Dividends declared,	\$75,000 00	
Balance June 30, 1890,	423,480 48	
	<u>\$498,480 48</u>	<u>\$498,480 48</u>

SALEM ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$46,035 43
Steam plant,	
Electric plant,	} 144,712 18
Lines, meters, lamps and globes,	
Franchise,	10,000 00
Due for electric light and power,	5,864 72
Fuel on hand,	1,327 60
Carbons on hand,	40 00
Globes on hand,	33 10
Other electric materials on hand,	405 57
Office furniture,	346 73
Cash on hand,	1,087 52
Total assets, as per books of the company,	<u>\$209,852 85</u>

LIABILITIES.

Capital stock,	\$140,000 00
Bonds issued,	35,500 00
Notes payable,	12,000 00
Unpaid bills,	4,109 92
Total liabilities, as per books of the company,	<u>\$191,609 92</u>
Profit and loss balance,	18,242 93
	<u>\$209,852 85</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$10,502 84
Balance of electric manufacturing account,		15,048 19
Interest received,		398 32
Other items of income,		3,872 45
Dividends declared,	\$5,600 00	
Interest paid,	1,474 84	
Construction charged off,	100 35	
Depreciation,	3,838 65	
Other items,	565 03	
Balance June 30, 1890,	18,242 93	
	<u>\$29,821 80</u>	<u>\$29,821 80</u>

SALEM GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Due for gas,			11,474 25
Gas coal on hand,			847 59
Coke on hand,			450 00
Enrichers on hand,			1,817 46
Purifying materials on hand,			506 00
Other gas materials on hand,			2,332 50
Stoves on hand,			111 79
Horse, wagons, etc.,			560 00
Sundry accounts due the company,			6,613 00
Office furniture,			200 00
Cash on hand,			11,988 87
Investments,			3,885 25
Total assets, as per books of the company,			<u>\$376,824 27</u>

LIABILITIES.

Capital stock,	\$300,000 00
Deposits,	442 00
Unpaid dividends,	51 00
Depreciation fund,	20,000 00
Amounts due from the company, not included above,	3,104 75
Total liabilities, as per books of the company,	<u>\$323,597 75</u>
Profit and loss balance,	53,226 52
	<u>\$376,824 27</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$82,927 86
Balance of gas manufacturing account,		24,784 84
Interest received,		220 14
Rents,		269 18
Dividends declared,	\$19,500 00	
Depreciation,	33,000 00	
Other items,	2,475 50	
Balance June 30, 1890,	53,226 52	
	<u>\$108,202 02</u>	<u>\$108,202 02</u>

SOMERVILLE ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$20,666 31
Steam plant,	33,588 76
Electric plant,	43,821 60
Lines, meters, lamps and globes,	99,074 46
Due for electric light and power,	4,304 79
Fuel on hand,	350 00
Carbons on hand,	180 00
Oil and waste on hand,	63 00
Incandescent lamps on hand,	596 03
Globes on hand,	21 16
Other electric materials on hand,	1,040 36
Horses, wagons, etc.,	550 00
Sundry accounts due the company,	2,874 09
Office furniture,	227 00
Cash on hand,	299 27
Total assets, as per books of the company,	<u>\$207,656 83</u>

LIABILITIES.

Capital stock,	\$120,000 00
Paid for new stock,	22,650 00
Notes payable,	56,978 21
Unpaid bills,	2,282 88
Total liabilities, as per books of the company,	<u>\$201,911 09</u>
Profit and loss balance,	5,745 74
	<u>\$207,656 83</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$2,916 13
Balance of electric manufacturing account,		8,229 61
Dividends declared,	\$5,400 00	
Balance June 30, 1890,	5,745 74	
	<u>\$11,145 74</u>	<u>\$11,145 74</u>

SOUTH BOSTON GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$200,945 76
Machinery and manufacturing appliances, }	
Street mains, }	274,366 09
Meters,	18,456 12
Due for gas,	7,723 84
Gas coal on hand,	12 42
Coke on hand,	760 42
Gas on hand,	157 40
Purifying materials on hand,	547 70
Other gas materials on hand,	977 54
Stoves on hand,	352 51
Patent rights,	25,000 00
Horses, wagons, etc.,	1,454 00
Sundry accounts due the company,	1,714 74
Cash on hand,	32,723 44
Investments,	26,000 00
Total assets, as per books of the company,	\$591,191 98

LIABILITIES.	
Capital stock,	\$440,000 00
Notes payable,	68,000 00
Unpaid bills,	1,025 87
Deposits,	2,063 95
Amounts due from the company, not included above,	907 04
Total liabilities, as per books of the company,	\$511,996 86
Profit and loss balance,	79,195 12
	\$591,191 98

PROFIT AND LOSS ACCOUNT.		DR.	CR.
Balance June 30, 1889,			\$62,799 64
Balance of gas manufacturing account,			52,891 52
Rents,			1,632 94
Dividends declared,	\$35,200 00		
Interest paid,	2,928 98		
Balance June 30, 1890,	79,195 12		
	\$117,324 10		\$117,324 10

SOUTHBRIDGE GAS AND ELECTRIC COMPANY.

ASSETS.	
Real estate (gas),	\$5,515 49
Machinery and manufacturing appliances (gas),	1,041 83
Street mains,	6,986 04

Meters (gas),	\$1,266 37
Due for gas,	81 45
Gas coal on hand,	11 50
Tar on hand,	20 00
Enrichers on hand,	197 32
Other gas materials on hand,	364 20
Gas fixtures on hand,	157 12
Real estate (electric),	3,622 91
Steam plant (electric),	9,351 59
Electric plant,	11,097 01
Lines, meters, lamps and globes (electric),	13,519 25
Electric franchise,	2,650 00
Due for electric light and power,	19 71
Fuel on hand (electric light),	253 76
Carbons on hand,	48 73
Oil and waste on hand,	25 06
Incandescent lamps on hand,	40 25
Globes on hand,	24 29
Other electric materials on hand, }	
Horses, wagons, etc.,	235 00
Office furniture,	54 00
Cash on hand,	991 94

Total assets, as per books of the company, . . . \$57,574 82

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	15,000 00
Total liabilities, as per books of the company, . . .	\$55,000 00
Profit and loss balance,	2,574 82

\$57,574 82

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$693 01
Balance of gas manufacturing account,		424 65
Balance of electric manufacturing account,		2,496 87
Increase lines, lamps & globes, by inventory,		1,548 77
Other items of income,		3 00
Dividends declared,	\$1,200 00	
Interest paid,	411 69	
Decrease electric plant, by inventory,	898 08	
Other items,	81 71	
Balance June 30, 1890,	2,574 82	
	\$5,166 30	\$5,166 30

SOUTH HADLEY FALLS ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$1,249 71
Electric plant,	5,236 59
Lines, meters, lamps and globes,	3,948 03
Due for electric light and power,	440 50
Incandescent lamps on hand,	135 00
Other electric materials on hand,	250 75

Total assets, as per books of the company, . . . \$11,260 58

LIABILITIES.

Capital stock,	\$7,000 00
Amounts due from the company, not included above,	4,260 58

Total liabilities, as per books of the company, . . . \$11,260 58

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$440 79
Interest paid,	\$140 00	
Depreciation of lines,	300 79	
	<u>\$440 79</u>	<u>\$440 79</u>

SPENCER GAS COMPANY.

ASSETS.

Real estate (gas),	\$21,928 71
Machinery and manufacturing appliances (gas),	73,071 55
Street mains (gas),	35,307 20
Meters (gas),	3,665 33
Due for gas,	3,404 52
Gas coal on hand,	220 00
Tar on hand,	60 00
Enrichers on hand,	252 04
Purifying materials on hand,	10 00
Stoves on hand,	1,060 17
Gas fixtures on hand,	1,095 87
Electric plant,	23,565 28
Lines, meters, lamps and globes (electric), }	
Due for electric light and power,	1,282 36
Gas engine on hand,	600 00
Carbons on hand,	34 00
Tools,	426 00
Oil and waste on hand,	27 50
Pipe, fittings, etc.,	455 00

Other electric materials on hand,	\$20 00
Meter provers,	137 00
Sundry accounts due the company,	5,864 13
Office furniture,	150 00
Notes receivable,	148 84

Total assets, as per books of the company,	\$172,785 50
Profit and loss balance,	9,615 55
	<u>\$182,401 05</u>

LIABILITIES.

Capital stock,	\$85,000 00
Bonds issued,	85,000 00
Unpaid bills,	1,334 06
Interest due but not paid,	2,550 00
Amounts due from the company, not included above,	8,516 99

Total liabilities, as per books of the company,	\$182,401 05
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$7,097 80	
Balance of gas manufacturing account,		\$269 12
Balance of electric manufacturing account,		1,593 13
Rents,		720 00
Interest paid,	5,100 00	
Balance June 30, 1890,		9,615 55
	<u>\$12,197 80</u>	<u>\$12,197 80</u>

SPRINGFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$161,033 10
Machinery and manufacturing appliances (gas),	209,537 08
Street mains (gas),	176,794 49
Meters (gas),	28,250 76
Due for gas,	4,301 37
Gas coal on hand,	4,423 61
Services,	11,564 81
Enrichers on hand,	828 43
Purifying materials on hand,	16 45
Gas burners on hand,	634 76
Stoves on hand,	778 15
Gas engine on hand,	300 00
Real estate (steam),	8,536 90
Steam plant,	75,250 09
Steam meters and fittings,	2,041 05
Due for steam,	4,558 21

Fuel on hand (steam),	\$821 25
Horses, wagons, etc.,	2,500 00
Sundry accounts due the company,	1,221 08
Office furniture,	1,365 10
Cash on hand,	20,088 65
Notes receivable,	1,820 58
Steam heating,	241 95
Total assets, as per books of the company,	<u>\$716,907 87</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	60,000 00
Deposits,	603 95
Total liabilities, as per books of the company,	<u>\$560,603 95</u>
Profit and loss balance,	156,303 92
	<u>\$716,907 87</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$155,492 66
Balance of gas manufacturing account,		63,851 23
Interest received,		665 50
Rents,		1,751 16
Other items of income,		2 62
Dividends declared,	\$40,000 00	
Interest paid,	3,665 09	
Depreciation,	21,794 16	
Balance June 30, 1890,	156,303 92	
	<u>\$221,763 17</u>	<u>\$221,763 17</u>

TAUNTON ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$4,000 00
Steam plant,	10,000 00
Electric plant,	14,000 00
Lines, meters, lamps and globes,	10,000 00
Due for electric light and power,	1,000 00
Fuel on hand,	20 00
Carbons on hand,	40 00
Oil and waste on hand,	15 00
Incandescent lamps on hand,	50 00
Globes on hand,	20 00
Other electric materials on hand,	50 00
Cash on hand,	4,462 72
Total assets, as per books of the company,	<u>\$43,657 72</u>

LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	3,000 00
Unpaid bills,	1,400 00
Total liabilities, as per books of the company, . . .	\$34,400 00
Profit and loss balance,	9,257 72
	<u>\$43,657 72</u>

TAUNTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$26,500 00
Machinery and manufacturing appliances,	53,500 00
Due for gas,	9,384 68
Gas coal on hand,	494 70
Coke on hand,	50
Tar on hand,	486 00
Enrichers on hand,	1 93
Purifying materials on hand,	172 50
Other gas materials on hand,	252 00
Stoves on hand,	1,309 52
Gas fixtures on hand,	2,317 00
Lungren lamps on hand,	1,183 45
Sundry accounts due the company,	2,269 54
Cash on hand,	9,310 54
Total assets, as per books of the company,	<u>\$107,182 36</u>

LIABILITIES.

Capital stock,	\$80,000 00
Deposits,	189 00
Total liabilities, as per books of the company,	\$80,189 00
Profit and loss balance,	26,993 36
	<u>\$107,182 36</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$29,106 90
Balance of gas manufacturing account,		18,180 01
Rents,		150 00
Other items of income,		17 06
Dividends declared,	\$8,000 00	
Old bills charged off,	421 50	
Depreciation,	11,738 36	
Other items,	300 75	
Balance June 30, 1890,	26,993 36	
	<u>\$47,453 97</u>	<u>\$47,453 97</u>

UNION ELECTRIC LIGHT COMPANY (FRANKLIN).

ASSETS.	
Real estate,	\$5,000 00
Steam plant,	9,341 84
Electric plant,	15,483 74
Lines, meters, lamps and globes,	14,858 77
Well,	124 21
Incandescent lamps on hand,	880 00
Other electric materials on hand,	2,371 16
Motors on hand, tools,	130 97
Horses, wagons, etc.,	270 00
Sundry accounts due the company,	325 36
Office furniture,	110 79
Cash on hand,	332 78

Total assets, as per books of the company,	\$49,229 72
Profit and loss balance,	2,016 15
	<hr/> \$51,245 87

LIABILITIES.	
Capital stock,	\$20,000 00
Bonds issued,	30,000 00
Unpaid bills,	1,245 07
Total liabilities, as per books of the company,	<hr/> \$51,245 87

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,	\$216 15	
Interest paid,	1,800 00	
Balance June 30, 1890,		\$2,016 15
	<hr/> \$2,016 15	<hr/> \$2,016 15

UNITED ELECTRIC LIGHT COMPANY (SPRINGFIELD).

ASSETS.	
Real estate,	\$60,661 70
Steam plant,	54,125 18
Electric plant,	118,429 95
Lines, meters, lamps and globes,	93,670 53
Oil and waste on hand,	125 41
Due for electric light and power,	12,621 86
Fuel on hand,	233 08
Carbons on hand,	185 63
Incandescent lamps on hand,	7,593 26
Globes on hand,	231 10
Other electric materials on hand,	606 50
Motors on hand,	13,714 20
Electric fixtures on hand,	5,367 08

Horses, wagons, etc.,	\$305 00
Sundry accounts due the company,	12,430 96
Office furniture,	467 10
Investments,	2,602 69

Total assets, as per books of the company, . . . \$383,371 23

LIABILITIES.

Capital stock,	\$300,000 00
Notes payable,	73,000 00
Unpaid bills,	9,190 34
Unpaid dividends,	13 50
Amounts due from the company, not included above, . . .	1,167 39

Total liabilities, as per books of the company, . . \$383,371 23

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$1,593 70	
Balance of electric manufacturing account,		\$21,937 04
Rents,		1,259 17
Dividends declared,	13,015 00	
Interest paid,	7,811 48	
Other items,	776 03	
	<u>\$23,196 21</u>	<u>\$23,196 21</u>

UXBRIDGE AND NORTHBRIDGE ELECTRIC COMPANY.

ASSETS.

Real estate,	\$4,552 99
Steam plant,	3,750 00
Electric plant,	6,150 00
Lines, meters, lamps and globes,	25,401 65
Franchise,	500 00

Total assets, as per books of the company, . . . \$40,354 64

Profit and loss balance, 57 36

\$40,412 00

LIABILITIES.

Capital stock,	\$20,000 00
Bonds issued,	8,000 00
Unpaid bills,	12,412 00

Total liabilities, as per books of the company, . . \$40,412 00

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of electric manufacturing account,	\$57 36	
Balance June 30, 1890,		\$57 36
	<hr/>	<hr/>
	\$57 36	\$57 36

WALTHAM GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$24,305 78
Machinery and manufacturing appliances (gas),	80,077 06
Street mains (gas),	42,847 75
Meters (gas),	5,500 00
Due for gas,	6,272 34
Gas coal on hand,	614 62
Coke on hand,	155 88
Tar on hand,	587 00
Purifying materials on hand,	18 00
Other gas materials on hand,	744 52
Stoves on hand,	188 34
Gas fixtures on hand,	1,248 10
Steam plant (electric),	8,673 73
Electric plant,	14,130 73
Lines, meters, lamps and globes (electric),	20,411 79
Due for electric light and power,	2,139 92
Fuel on hand (electric light),	245 50
Carbons on hand,	65 53
Oil and waste on hand,	63 95
Incandescent lamps on hand,	449 20
Globes on hand,	16 97
Other electric materials on hand,	1,097 99
Horses, wagons, etc.,	873 97
Sundry accounts due the company,	2,631 40
Office furniture,	750 98
Cash on hand,	2,153 51
Electric plant extension,	6,515 15

Total assets, as per books of the company, \$222,779 71

LIABILITIES.

Capital stock,	\$140,000 00
Bonds issued,	20,000 00

Total liabilities, as per books of the company, \$160,000 00
Profit and loss balance, 62,779 41

\$222,779 41

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1889,		\$48,699 63
Balance of gas manufacturing account, .		19,044 50
Balance of electric manufacturing account,		5,035 42
Interest received,		51 50
Other items of income,		94 89
Dividends declared,	\$8,400 00	
Interest paid,	1,022 00	
Depreciation,	724 23	
Balance June 30, 1890,	62,779 71	
	<hr/>	<hr/>
	\$72,925 94	\$72,925 94

WARE ELECTRIC LIGHT COMPANY.

ASSETS.		
Real estate,		\$1,927 84
Steam plant,		2,580 97
Electric plant,		7,111 55
Lines, meters, lamps and globes,		11,990 36
Sundry accounts due the company,		177 86
Cash on hand,		445 98
Total assets, as per books of the company,		<hr/> \$24,184 56
Profit and loss balance,		457 96
		<hr/> \$24,642 52
LIABILITIES.		
Capital stock,		\$15,000 00
Unpaid bills,		9,642 52
Total liabilities, as per books of the company,		<hr/> \$24,642 52

WEBSTER ELECTRIC COMPANY.

ASSETS.		
Real estate (gas),	}	\$30,469 90
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Meters (gas),		
Gas coal on hand,		681 29
Coke on hand,		56 00
Gas on hand,		25 00
Barrels on hand,		57 00
Real estate (electric),	}	47,371 13
Steam plant (electric),		
Electric plant,		
Lines, meters, lamps and globes (electric),		
Electric materials on hand,		2,015 95
Sundry accounts due the company,		1,798 29

Cash on hand,	\$339 32
Notes receivable,	44 00
Unexpired insurance,	70 17
Total assets, as per books of the company, . . .	<u>\$82,857 91</u>

LIABILITIES.

Capital stock,	\$45,000 00
Bonds issued,	30,000 00
Notes payable,	2,480 34
Unpaid bills,	2,345 25
Total liabilities, as per books of the company, . .	<u>\$79,825 59</u>
Profit and loss balance,	3,102 49
	<u>\$82,928 08</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$1,296 24
Balance of gas manufacturing account,		588 25
Balance of electric manufacturing account,		1,478 01
Other items of income,		1,639 77
Interest paid,	\$1,899 78	
Balance June 30, 1890,	3,102 49	
	<u>\$5,002 27</u>	<u>\$5,002 27</u>

WESTBOROUGH ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$5,744 88
Steam plant,	6,981 66
Electric plant,	10,780 45
Lines, meters, lamps and globes,	14,009 68
Patent rights and franchise,	4,500 00
Due for electric light and power,	703 90
Other electric materials on hand,	859 02
Sundry accounts due the company,	866 25
Cash on hand,	105 28
Total assets, as per books of the company, . . .	<u>\$44,551 12</u>

LIABILITIES.

Capital stock,	\$22,700 00
Notes payable,	19,800 00
Unpaid bills,	1,957 87
Total liabilities, as per books of the company, . .	<u>\$44,457 87</u>
Profit and loss balance,	93 25
	<u>\$44,551 12</u>

WESTFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$2,430 00
Machinery and manufacturing appliances (gas),	29,691 17
Street mains and services (gas),	15,204 50
Meters (gas),	1,809 19
Due for gas,	2,278 49
Gas coal on hand,	177 88
Enrichers on hand,	156 53
Purifying materials on hand,	45 00
Gas fixtures on hand,	118 08
Real estate (electric),	9,406 01
Steam plant (electric),	6,476 71
Electric plant,	4,804 70
Lines, meters, lamps and globes (electric),	10,231 57
Converters,	1,447 94
Due for electric light and power,	868 33
Fuel on hand (electric light),	124 95
Carbons on hand,	173 55
Oil and waste on hand,	106 76
Globes on hand,	23 00
Other electric materials on hand,	17 91
Sundry accounts due the company,	1,730 06
Cash on hand,	4,018 99
Total assets, as per books of the company,	<u>\$90,841 32</u>

LIABILITIES.

Capital stock,	\$51,000 00
Notes payable,	23,500 00
Amounts due from the company, not included above,	1,367 27
Total liabilities, as per books of the company,	<u>\$78,867 27</u>
Profit and loss balance,	11,974 05
	<u>\$90,841 32</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$9,735 78
Balance of gas manufacturing account,		7,238 65
Balance of electric manufacturing account,		3,143 33
Interest received,		1,704 19
Rents,		23 74
Dividends declared,	\$1,320 00	
Interest paid,	3,000 02	
Depreciation (electric),	2,551 21	
Balance June 30, 1890,	11,974 05	
	<u>\$21,845 28</u>	<u>\$21,845 28</u>

WEYMOUTH LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$11,905 41
Steam plant,	16,455 93
Electric plant,	26,824 50
Lines, meters, lamps and globes,	67,386 89
Due for electric light and power,	2,776 92
Fuel on hand,	550 00
Carbons on hand,	474 80
Oil waste on hand,	23 76
Incandescent lamps on hand,	120 00
Globes on hand,	20 70
Other electric materials on hand,	474 60
Office furniture,	50 00
Cash on hand,	120 80

Total assets, as per books of the company, . . . \$127,184 31

LIABILITIES.

Capital stock,	\$50,000 00
Bonds issued,	50,000 00
Notes payable,	15,000 00
Unpaid bills,	10,953 21

Total liabilities, as per books of the company, . . \$125,923 51

Profit and loss balance, 1,260 80

\$127,184 31

WHITMAN ELECTRIC COMPANY.

ASSETS.

Steam plant,	\$1,235 00
Electric plant,	6,135 00
Lines, meters, lamps and globes,	13,883 33
Due for electric light and power,	439 39
Carbons on hand,	41 84
Oil and waste on hand,	53 80
Incandescent lamps on hand,	152 50
Globes on hand,	14 70
Other electric materials on hand,	1,363 02
Horses, wagons, etc.,	150 00
Sundry accounts due the company,	346 99
Cash on hand,	519 88

Total assets, as per books of the company, . . . \$24,335 45

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	3,428 07
Total liabilities, as per books of the company, . .	\$23,428 07
Profit and loss balance,	907 38
	<u>\$24,335 45</u>

WINCHENDON ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Electric plant,	\$6,654 57
Lines, meters, lamps and globes,	5,820 27
Due for electric light and power,	74 31
Fuel on hand,	2 43
Carbons on hand,	5 00
Oil and waste on hand,	52 19
Other electric materials on hand,	1,178 57
Sundry accounts due the company,	11 70
Insurance,	80 21
Cash on hand,	11,805 14
Total assets, as per books of the company, . . .	\$25,684 39
Profit and loss balance,	145 58
	<u>\$25,829 97</u>

LIABILITIES.

Capital stock,	\$12,000 00
Unpaid bills,	13,829 97
Total liabilities, as per books of the company, . .	\$25,829 97

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,	\$145 58	
Balance June 30, 1890,		\$145 58
	<u>\$145 58</u>	<u>\$145 58</u>

WOBURN ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$21,608 36
Steam plant,	29,414 87
Electric plant,	51,708 35
Lines, meters, lamps and globes,	112,125 58
Patent rights,	21,000 00
Due for electric light and power,	2,189 40
Fuel on hand,	1,406 30

Carbons on hand,	\$70 00
Oil and waste on hand,	49 75
Incandescent lamps on hand,	718 90
Globes on hand,	944 00
Other electric materials on hand,	6,335 30
Electric fixtures on hand,	722 73
Sundry accounts due the company,	5,190 79
Office furniture,	150 25
Cash on hand,	5,306 74

Total assets, as per books of the company, . . . \$258,006 76

LIABILITIES.

Capital stock,	\$120,000 00
Bonds issued,	100,000 00
Notes payable,	28,430 90
Unpaid bills,	8,095 74

Total liabilities, as per books of the company, . . \$256,526 24
 Profit and loss balance, 1,480 52

\$258,006 76

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,	\$1,579 85	
Balance of electric manufacturing account,		\$4,477 87
Dividends declared,	900 00	
Interest paid,	517 50	
Balance June 30, 1890,	1,480 52	
	<u>\$4,477 87</u>	<u>\$4,477 87</u>

WOBURN GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	28,000 00
Street mains,	28,000 00
Meters,	3,000 00
Due for gas,	1,807 63
Gas coal on hand,	927 50
Tar on hand,	300 00
Enrichers on hand,	140 00
Purifying materials on hand,	100 00
Other gas materials on hand,	235 87
Office furniture,	140 25
Cash on hand,	4,868 15
Notes receivable,	2,500 00
Investments,	7,350 00

Total assets, as per books of the company, . . . \$86,869 40

LIABILITIES.

Capital stock,	\$45,100 00
Unpaid bills,	84 00
Deposits,	5 00
Total liabilities, as per books of the company, . . .	\$45,189 00
Profit and loss balance,	41,680 40
	<u>\$86,869 40</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$41,311 69
Balance of gas manufacturing account,		4,968 65
Interest received,		478 83
Other items of income,		272 23
Dividends declared,	\$3,608 00	
Construction charged off,	251 26	
Depreciation,	1,491 74	
Balance June 30, 1889,	41,680 40	
	<u>\$47,031 40</u>	<u>\$47,031 40</u>

WORCESTER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$78,436 97
Steam plant,	43,363 59
Electric plant,	40,822 40
Lines, meters, lamps and globes,	54,637 23
Due for electric light and power,	11,443 38
Fuel on hand,	66 08
Carbons on hand,	450 00
Oil and waste on hand,	26 72
Incandescent lamps on hand,	343 70
Globes on hand,	289 13
Other electric materials on hand,	2,737 99
Electric fixtures on hand,	1,245 55
Sundry accounts due the company,	1,019 28
Office furniture,	1,057 07
Cash on hand,	4,225 07
Total assets, as per books of the company,	<u>\$240,160 16</u>

LIABILITIES.

Capital stock,	\$200,000 00
Notes payable,	10,000 00
Unpaid bills,	10,985 82
Total liabilities, as per books of the company,	\$220,985 82
Profit and loss balance,	19,174 34
	<u>\$24,160 16</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$2,431 38
Balance of electric manufacturing account,		28,654 74
Interest received,		716 19
Other items of income,		129 20
Dividends declared,	\$8,750 00	
Depreciation,	4,992 17	
Other items,	15 00	
Balance June 30, 1890,	19,174 34	
	<u>\$32,931 51</u>	<u>\$32,931 51</u>

WORCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$126,000 00
Machinery and manufacturing appliances,	179,083 88
Street mains,	222,380 33
Meters,	19,333 66
Due for gas,	959 34
Gas coal on hand,	6,480 00
Coke on hand,	875 00
Tar on hand,	1,575 00
Enrichers on hand,	315 00
Purifying materials on hand,	100 00
Other gas materials on hand,	2,607 45
Stoves on hand,	996 00
Cash on hand,	4,000 63
Investments,	3,352 50

Total assets, as per books of the company, \$568,058 79

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	20,000 00
Deposits,	949 00
Unpaid dividends,	10,228 00

Total liabilities, as per books of the company, . . . \$531,177 00

Profit and loss balance, 36,881 79

\$568,058 79

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1889,		\$22,502 02
Balance of gas manufacturing account,		56,123 02
Interest received,		392 95
Other items of income,		20 45
Dividends declared,	\$40,000 00	
Interest paid,	1,583 06	
Depreciation,	573 59	
Balance June 30, 1890,	36,881 79	
	<u>\$79,038 44</u>	<u>\$79,038 44</u>

APPENDIX B.

[CHAP. 252, ACTS OF 1890.]

AN ACT REMOVING RESTRICTIONS FROM THE MANUFACTURE AND
SALE OF WATER GAS FOR ILLUMINATING PURPOSES.

Be it enacted, etc, as follows:

SECTION 1. Section fourteen of chapter sixty-one of the Public Statutes, relating to the inspection of gas, is hereby amended by striking out in the fifteenth line the words "or more than ten per cent. of carbonic oxide," so that the last two clauses of said section as amended shall read as follows: — When the gas of any company is found on three consecutive inspections to give less light than fifteen standard English candles, or to contain more than twenty grains of sulphur or ten grains of ammonia per hundred cubic feet of gas, or any sulphuretted hydrogen, a fine of one hundred dollars shall be paid by such company to the city or town supplied by it. When during the test the consumption of gas varies from five feet per hour, or the candle from one hundred and twenty grains per hour, a proportionate correction shall be made for the candle power.

SECTION 2. Chapter four hundred and twenty-eight of the acts of the year eighteen hundred and eighty-eight, authorizing the gas commissioners to license certain gas companies to make and sell water gas for illuminating purposes, is hereby repealed.

SECTION 3. This act shall take effect upon its passage.
[Approved April 30, 1890.]

[CHAP. 371, ACTS OF 1890.]

AN ACT IN RELATION TO BONDS ISSUED BY ELECTRIC LIGHT
COMPANIES.

Be it enacted, etc, as follows:

SECTION 1. Any company now or hereafter established under the laws of the Commonwealth and having the right to erect and maintain posts, wires or other fixtures in, over or under public streets and highways for the purpose of furnishing electricity for

light or power, is hereby authorized, subject to the provisions of this act, to secure the payment of bonds issued or to be issued by such corporation by a mortgage of its franchise in connection with its tangible property; so that all persons acquiring any posts, wires or fixtures by, through or under such mortgage shall have the same rights and be subject to the same obligations with respect to the erection, care and maintenance of such posts, wires and fixtures as would be vested in and imposed upon the corporation itself had not such mortgage been made. Such mortgage and all bonds hereafter issued shall be authorized by vote of a majority in interest of the stockholders of the company at a meeting called for that purpose; and the rate of interest on such bonds shall not exceed six per centum per annum.

SECTION 2. No bonds shall be issued by any such company for an amount exceeding its capital stock which shall at the time have been actually paid in and applied to the purposes of the corporation; and the proceeds of all bonds shall be applied to the payment of obligations incurred for the enlargement or extension of the plant or the purchase of real estate for the use of the company, or for the payment of liabilities existing at the time of the passage of this act.

SECTION 3. This act shall take effect upon its passage.
[Approved June 3, 1890.]

[CHAP. 404, ACTS OF 1890.]

AN ACT RELATING TO THE REGULATION AND SUPERVISION OF WIRES
OVER STREETS OR BUILDINGS IN CITIES.

Be it enacted etc., as follows:

SECTION 1. Every person or corporation, private or municipal, owning or operating a line of wires over streets or buildings in a city, shall use only wires that are suitable and strong; shall suitably and safely attach them to strong and sufficient supports, and insulate them at all points of attachment; shall remove all wires abandoned for use; shall suitably insulate every wire where it enters a building, and, if such wire is other than a wire designed to carry an electric light or power current, shall attach to it at suitable and convenient points in the circuit, calculating to prevent danger from fire and near the place of entering the building, an appliance calculated to prevent at all times a current of electricity of such intensity or volume as to be capable of injuring electrical instruments or causing fire from entering the building by means of such wire, beyond the point at which such appliance is attached,

and shall suitably insulate every wire within a building when such wire is designed to carry an electric light current.

SECTION 2. Every such person and corporation shall, in the several cities, within six months after the appointment of the officer hereinafter provided for, affix at the points of support at which any such wire or cable containing wires is attached, a tag or mark distinctly designating the owner or user of such wire or cable. No such tag or mark shall be required for the wires of a street railway company used for the transmission of its motive power nor for the protection or support of such wires.

SECTION 3. Every city shall, by ordinance, designate or provide for the appointment of an officer who shall supervise every wire over streets or buildings in such city, and every wire within a building when such wire is designed to carry an electric light or power current; shall notify the person or corporation owning or operating any such wire whenever its attachments, insulation, supports or appliances are unsuitable or unsafe, or the tags or marks thereof are insufficient or illegible, and shall, at the expense of the city, remove every wire abandoned for use, and every wire which after the six months aforesaid shall be unprovided with a tag or mark, as hereinbefore required, such expense to be repaid by the owner of such wire; and shall see that all laws, ordinances and regulations relating to such wires are strictly enforced.

SECTION 4. Any city may recover, in an action of contract, of the person or corporation owning any such wire as is hereinbefore described, any expense which it may have incurred for any removal thereof.

SECTION 5. Any court having equity jurisdiction or any justice thereof, in term time or vacation, may, on a petition of the officer designated or appointed as aforesaid, by any suitable process or decree in equity enforce the provisions of this act and may, on such petition, issue an injunction or other suitable process to restrain the use or maintenance, or to cause the removal, of any wire, post or other support erected, maintained or used in violation of this act.

SECTION 6. This act shall take effect upon its passage. [*Approved June 11, 1890.*]

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SEVENTH ANNUAL REPORT

OF

THE BOARD

OF

GAS AND ELECTRIC LIGHT
COMMISSIONERS.

OF THE

Commonwealth of Massachusetts.

JANUARY, 1892.

BOSTON :
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.

1892.

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Commonwealth of Massachusetts.

The Board of Gas and Electric Light Commissioners respectfully submits its Seventh Annual Report.

There was a change in the membership of the Board in July last at the expiration of the term of Hon. A. B. Coffin, who declined a re-appointment. His associates desire to express their appreciation of the fidelity, ability and integrity with which for four years he discharged the important duties of Chairman.

There are now one hundred and thirty-one companies under the supervision of the Board, twenty-six of which supply both gas and electric light, fifty-eight only electric light, and forty-seven only gas.

It is apparent that the province and work of the Board is becoming better understood by the public, and during the last year, in addition to the duties imposed by the statute, it has been frequently consulted by city and town committees, managers and investors in regard to questions concerning gas and electric lighting. Those interested in these matters have come to consider it the most convenient source from which to obtain reliable information as to the standing and financial operations of the companies and their relation to the local authorities, as well as in regard to many of the technical features of the business.

The Board is compelled to again call attention to the failure of many of the companies to make their returns within the time fixed by statute and to urge the passage of an act imposing a suitable penalty in such cases. It is evident that the time now allowed is ample, since the largest companies, whose accounts are the most complex, find no serious difficulty in obeying the law. Of one

hundred and thirty-one returns due on the second Wednesday of September, only forty-five had reached this office on that day.

The Board cannot better express its present view of this matter than by the following words from the report of last year: "The present remedy is by reporting the delinquency to the Attorney-General, who proceeds before the courts with the request that the companies be enjoined from doing business until they shall have made report. A fine for each day's delay, as in the case of railroad companies, would doubtless be effective, and thus allow the time needed to correct and tabulate the numerous details of the returns. If the returns were promptly filed, the time left for compiling and printing the data would be sufficient; but, with the tardy practice of the companies, the Board is now, as formerly, unable to have its annual report seasonably printed for the use of the Legislature."

The Spencer Gas Company, to which particular reference has been made in previous reports as supplying the same gas for lighting and for fuel at \$1.25 per thousand feet, with special attention to the latter use, has been compelled after continued losses to advance its rate to \$1.60.

A new departure in this Commonwealth is the Framingham Gas Fuel and Power Company which began in January last to supply non-illuminating water-gas to consumers in South Framingham for from fifty to seventy-five cents net per thousand feet.

This gas is made from steam and Cumberland coal, by what is known as the Loomis process, with sufficient enricher added to give it a perceptible odor, and passes through lime and oxide of iron for the purpose of purification. Although designed primarily for fuel purposes, the gas is used for lighting in combination with what is known as the Fahnehjelm burner, consisting of a magnesia comb which is heated to incandescence by the gas. The company has about one hundred customers. The Cottage City Company also makes only non-illuminating water-gas by a similar process.

A consolidation of the two companies in Middleborough has been effected by the purchase of the Middleborough Electric Light and Power Company by the Middleborough Gas and Electric Company. An extended reference to the history of these companies is contained in the report of the Board for 1889.

The Gardner Electric Light Company has succeeded to the business and property of the Gardner Electric Company, paying therefor the amount of the mortgage notes of the latter and assuming its debts.

The property and franchises of the Miller's River Gas Light Company were sold by the mortgagees under foreclosure and the purchasers have been incorporated as the Athol Gas and Electric Company.

A similar course was pursued by the mortgagees of the Stoughton Light, Heat and Power Company, incorporated under the laws of Maine, and the purchasers have become a Massachusetts corporation under the name of Stoughton Gas and Electric Company.

The Holliston Gas and Electric Company of Holliston, with \$8,000 capital, and the Consumers' Gas Company of New Bedford, with \$15,000 capital, are the only other lighting corporations chartered during the year.

The Easthampton Gas Company made the only application which the Board received during the year under chapter 385 of the Acts of 1887.

Proceedings have been begun in the Supreme Judicial Court during the year by the Attorney-General against the Walworth Light and Power Company, to compel the removal of numerous wires running over streets in the central portion of the city of Boston and used for the supply of electric light. These wires were erected and maintained without permission from the city, and in the face of a formal rejection by the aldermen of the petition of the company asking leave to construct and maintain them.

The company admitted the existence and use of the wires as stated, but contended that there was no violation of the statute because all the wires involved were either originally built and ever since owned by certain of its customers, or if built by the company, the portions over the streets had been sold to certain customers prior to the suit, and that the wires which the company now owned were not constructed by it but purchased from a former owner. The case was heard before a single justice in September, but no decision has yet been rendered.

The fact that such a contention can be seriously made calls strongly for a careful examination of the statute, to discover

whether it fully expresses what was intended at the time of its enactment, and whether it ought not, in the interest of the public, to be made more definite and clear in its terms.

If the respondent's claim can be maintained, no power now exists in the authorities of state or city to check the indiscriminate and needless multiplication of electric wires in the public streets, and the legislation passed in response to a general demand for the suppression of a well recognized evil will prove of doubtful value.

ELECTRIC METERS.

The use of electric meters for ascertaining the quantity of incandescent light supplied to consumers is becoming more general, and the sale of such light by the contract system somewhat less common. There is some diversity of opinion among managers as to the expediency of using meters, and customers often find their bills largely increased when changing from the contract to the meter method of purchase. In most of the cases which have come to the attention of the Board, the increase has been because the customer had received his lights under a contract which brought an appreciable loss to the company.

There are two types of meter now upon the market. In neither of these does the entire current pass through the meter, but only a portion which is shunted out or divided from the main current and maintains a constant relation thereto. In one type this shunted current passes through two plates of chemically pure zinc, and a solution of zinc sulphate in which they are suspended. The current decomposes the solution, deposits a certain quantity of zinc on one plate and dissolves an equal amount from the other, these amounts varying as the quantity of the current passing through. These plates are weighed before and after use and the quantity of electricity used is computed from the differences in weight. In the other type the shunted current is used to excite an electro-magnet, which causes a small armature to revolve whenever the electric current passes through. The speed of the armature varies with the strength of the magnet, and this varies again as the quantity of the current. The armature is connected by toothed wheels with dials similar to those in a gas meter so

contrived as to record the quantity of current supplied to the consumer in ampere-hours or watt-hours.

The former type is known as the Edison meter and is sold for use only with that system. The latter is adapted to the alternating system of distribution. The weight of opinion seems to be that either kind will give satisfactory results when properly set up and free from external disturbing influences.

The increasing use of meters has called attention to the possible necessity for a new basis for charges for incandescent electric lighting service. With many companies the difference between average and maximum load is very great, and the largest demand lasts but a short time. This is most marked in those companies where a large share of the business is for manufacturing or mercantile establishments which close early and require lights for only a portion of the year. Until some method of storing electric energy in large quantities which shall have greater commercial value than any now upon the market is devised, both the generating and distributing plant of a company must be capable of maintaining a satisfactory standard of light at the time of maximum load.

For these reasons machinery which is much of the time idle represents a considerable portion of the investment seeking dividends, and the question arises whether the necessary charge for this should be distributed among all the consumers of the company, or be borne by those for whose benefit the investment is made. In other words, should the entire income of the company be derived from a uniform price per watt-hour or per ampere-hour for energy supplied, or should a portion come from a fixed charge based upon the size and character of the installation and its use, in addition to the regular meter rate, which would thus be lower than under the first method.

One difficulty in the way of a satisfactory answer lies in the lack of sufficiently reliable data concerning the cost of generating and distributing electric energy. In many large stations the question is of minor importance, owing to the greater uniformity of load, but may be of great consequence where any considerable percentage of the maximum is needed for a short time only.

F. P. JEWETT, PETITIONER.

Mr. F. P. Jewett of Winchester filed a petition against the Arlington Gas Light Company, asking that it be required to supply him with gas at his residence.

It appeared that three years ago the company began to make a uniform charge for meter rental of \$3 per year in all cases where the customer's bill for the year was less than \$7. The meter states were taken and bills rendered quarterly, the meter rental being added to the fourth quarterly bill.

The petitioner, having paid \$3 per year meter rent for two years, refused to pay a similar charge the third year, claiming it was exorbitant, but offered to pay for his fourth quarterly bill such amount as would make the sum of his bills for the year \$7. This proposition the company refused to accept, and after notice removed the meter and shut off the supply of gas.

After the hearing before the Board the company decided to accept the petitioner's offer and replace the meter, so that no order was necessary.

SHEPARD, NORWELL & Co., PETITIONERS.

Messrs. Shepard, Norwell & Co. of Boston filed with the Board a petition against the Edison Electric Illuminating Company of Boston, complaining that said company had refused to supply them with light unless they would use what are known as "Edison lamps." A hearing was appointed, but before it was held an amicable arrangement between the parties was reached, and at their joint request the case was indefinitely postponed.

RICHARD OLNEY *et als.*, PETITIONERS.

A petition was received from Richard Olney, Francis I. Amory and William Minot, Jr., against the Edison Electric Illuminating Company of Boston, alleging that the petitioners were owners of residences then building on Commonwealth Avenue, near Charlesgate East, in the city of Boston; that although the respondent company had obtained permission to place its wires under the said avenue, in front of said residences, yet it had refused to supply them and had declined to extend its system of wires west of West Chester Park.

The petitioners asked that the company be required to supply them with light upon such terms as might be legal and reasonable. A hearing was ordered, but before it was held the petitioners decided to accept an offer made by the Boston Electric Light Company to supply them, and so notified the Board. The petition was accordingly dismissed.

PETITION OF CONSUMERS *v.* BOSTON GAS LIGHT COMPANY.

On Feb. 4, 1891, the following petition was received addressed to the Board:—

We, the undersigned, customers of the Boston Gas Light Company, hereby complain of the unreasonably high prices charged for gas by the said company, and petition that you will, acting under the powers vested in you by law, order the Boston Gas Company to reduce its price to one dollar (\$1.00) per thousand feet, or to such lower price as will allow the company to pay dividends not in excess of ten per cent. (10%) annually upon its capital stock of \$2,500,000.

This was signed by J. W. Estabrook & Co. and nineteen others. On this petition a public hearing was ordered, as the law requires; and, after several continuances requested by the parties interested, the case was finally heard on the respondent's motion to dismiss. In this it was claimed that the petition was not signed by twenty customers of the company, as required by law, certain of the signers not being at the time of signing, or thereafter at any time, customers of the respondent.

The ground alleged being supported by the facts presented, the motion to dismiss was allowed.

PETITION OF CONSUMERS *v.* CHELSEA GAS LIGHT COMPANY.

This was a petition by the mayor and other citizens of Chelsea against the Chelsea Gas Light Company. It asked that the company be required to improve the quality of the electric light, to supply such light at all hours of the day, and to reduce the price of electric light and of gas. The petition was filed Jan. 29, 1890, and a public hearing in Chelsea was ordered for February 26, but the case was continued from time to time, at the request of the petitioners, so that the hearings were not finished until near the close of that year.

At the time of filing the petition the incandescent electric lights were run only until midnight, but before the case was fully heard the company began to supply these lights from dark to daylight, and, as the Board understands, will continue so to do. The petitioners, however, urged that the lights ought to be supplied during the remainder of every twenty-four hours. To do this would require a considerable additional outlay for labor and materials. At the hearings it appeared that the desire for day lighting was limited to three or four consumers, who would require in all but few lights; one or two others desired power for small motors. If current were supplied for both purposes, the income would be but a small portion of the cost. The loss from such business would probably be borne in the end by other consumers, and the Board does not feel warranted in requiring the company to incur it. It believes, however, that as soon as any substantial demand for electric power appears, the company ought to make special effort to encourage its use, and to begin its supply as soon as it can be furnished at only a moderate loss. The small number of lights desired in the day-time might then be supplied at but little expense.

In the opinion of the Board no general order under this petition, concerning the quality of the incandescent light, seems to be demanded by the facts presented. Out of a large number of witnesses but few complained of poor lights; by far the greater number expressed satisfaction with them. The complaints, when carefully considered, seemed to be founded in fact, but to be due to a variety of local causes, such as overloading of converters, inadequate wiring, lights too few or too small, and bulbs blackened with long use. In some of these instances the remedy is in the hands of the consumer alone. In the other cases it did not appear that the complaints had ever been made at the company's office. Upon learning of them at the hearing, the company's agents expressed their desire to remedy the troubles and any similar ones thereafter arising. It is clearly the duty of a consumer who has trouble with his light to first make complaint to the company; and to this Board only when such complaint fails to secure a remedy. The authority of the Board has been found ample for

the removal of any real grievance, although affecting only a single consumer.

But little evidence was directed to the question of electric light prices. The street lights are maintained at prices fixed by a contract with the company for a term of years. It did not appear that the prices to private consumers were higher than those generally charged by other companies making only a fair profit. The company's books show that more than \$80,000 has been invested in this branch of its business, and a careful investigation shows that it has been economically and carefully expended. For this work the company has incurred a debt of about \$75,000, and its electric business, with no allowance for depreciation, has returned a profit of barely five per cent. upon this sum. In view of these facts the Board believes it would not be justified in requiring a reduction in the price of electric lights at the present time.

The evidence submitted by the petitioners about the price of gas was almost entirely drawn from the printed reports of the Board, without the assistance of persons familiar with the business. They urged, however, that the several returns made by the company, its books of account and corporate records, be thoroughly and carefully examined, and that all competent facts found therein be fully considered.

In this examination the Board has expended much time, and has found such work necessary for a fair and impartial determination of the important questions involved.

For several years the dividends paid by the company have been only six per cent., which would be generally conceded to be a low rate, being in fact below the average dividend of successful companies, while the surplus profits applied to improvements have not been exceptionally large. On the other hand, it is a fact that more than a score of companies in the State have higher dividends and lower prices for gas. It has been necessary, therefore, to carefully study the company's management in all departments, and to seek to discover whether improvements might not be introduced, beneficial to shareholders and consumers alike. The company now enjoys a monopoly of the supply of gas and electric light. To

preserve this, it must keep fully abreast with the times, and must employ all suitable methods and appliances for the economical manufacture and distribution of its product; its management must be no less efficient and no more costly than that of others, and the charges for depreciation, improvements and profits must be no larger than in other similar and successful companies. If, however, there are local conditions, peculiar in their character, which impose exceptional burdens, these are to be estimated at their full value, and the company should not be required to supply at a lower price than any other corporation, well equipped and managed, would reasonably demand for the successful conduct of a like business in the same territory.

It was urged by the petitioners that if the works were upon the water front a considerable saving would be made, and that their present location imposed upon the public a needless burden. It does not appear, however, that any such location is now available, except at a price much too high. If such land had been secured when the works were built, it would now be so valuable that the interest on the larger investment, and the additional taxes, would more than offset any saving in handling of coal, which is now carted to the works at a net cost of possibly two cents for each thousand feet of gas.

Gas in the holder costs the Chelsea company but little more than the best companies charging lower prices. The excess is not large enough to be an important factor in justifying the difference in rates, and would probably nearly or quite disappear after needed improvements in the retort house.

In other departments of the company's work the same closeness of expenditure does not seem to exist. The cost for taxes is exceptionally high. For every thousand feet of gas sold the company pays, from seventy-five to one hundred per cent. more for taxes than almost any other company selling at a lower price. The expenditure for this purpose is greater than the entire cost of distribution or management. Whether this is due to an excessive valuation or high rate is immaterial. The fact exists, and becomes important in any attempt to fix the price. While this expense may be assumed to be without the company's control,

the same cannot be said of the cost of distribution, management or capital; especially the two former. These are unusually large in the Chelsea company, and in the opinion of the Board may well be reduced in the interest of the consumers.

The principal objection to an earlier reduction of the present price by the company is found in the fact that to pay dividends upon the present capital, even at the low rate named, has required an amount from every thousand feet sold that is larger, with but few exceptions, than that required by any other company in the State. The responsibility for this does not rest upon the present conservative management; it has come to them from a former administration. An injudicious conversion of profits, or supposed profits, into stock imposes in the end certain loss upon consumers or future holders of stock. The original issue of capital was larger than the fair cash value of the plant secured, and twice in the company's history it has distributed among its shareholders new capital, for which it has received no equivalent in permanent improvements; and although neither increase was large, the total has become burdensome. Only by a steady adherence to an opposite policy are the best companies in the State now able to maintain liberal dividends and low rates for gas.

In the opinion of the Board the amount per thousand feet required of consumers in Chelsea for dividends ought to be reduced. The price suggested is based upon these considerations, and, in view of the entire history of the company, seems fair and just to all concerned. If, in maintaining this price, it shall become necessary to reduce the rate of dividend until the consumption of gas shall be increased, or cost in holder and leakage loss be reduced through improvements in plant, such course will, nevertheless, give added strength to the corporation and greater permanency and steadiness to the value of stock.

The Board recommended that, from and after the first day of July, 1891, the price of gas in Chelsea be so reduced that the net rate charged shall not exceed \$1.75 per thousand feet to customers using not less than four hundred thousand feet per year, and \$1.80 per thousand to all others.

This decision was communicated to the company on May 6, and

on May 13 the directors voted to adopt the recommendations of the Board and to fix the price of gas in accordance therewith.

EASTHAMPTON GAS COMPANY, PETITIONER.

This was an application of the Easthampton Gas Company for authority to engage in the business of generating and furnishing electricity for light and power.

A public hearing was held at Easthampton, Feb. 6, 1891, in accordance with the notice published in the local newspaper, and served on the town, the petitioner and the People's Electric Company. The companies were represented by their presidents, and the town by one of the selectmen, who made no objection to the granting of the petition on the part of the town. A considerable number of citizens were in attendance, one or two of whom were heard in opposition to the proposed consolidation. The opinion generally expressed by those present was in favor of it, and all showed a desire for the continuance of the electric lights in the streets.

By the evidence it appeared that the capital of the petitioning company was over \$30,000, and that of the People's Electric Company \$5,000. The latter company was supplying about thirty-five arc lamps for lighting the streets of the village, which comprised a population of about 3,000. The Electric Company owned no land or steam plant but hired its power.

Both companies have the same clerk, and the same men constitute a majority of the directors in each. The belief expressed by them that the gas company could more economically manage the electric lighting rests, in the opinion of the Board, on a sound basis. The electric business is small and inadequate for the proper support of a separate company. From inspection of the premises it appeared that the gas works were suitably situated with vacant land adjacent available for an electric plant.

Some fear was manifested that, in case the petition should be granted, the price of electric light would be raised, and that the gas company would not be willing to supply incandescent lights. It will be remembered that the petitioner gave assurance at the hearing that the price would not be increased; and the Board can

see no reason why the price should be raised as the result of consolidation. If it believed such to be the end sought, the petition would be dismissed. Attention was called to the statutes which enable the Board to fix the price of light, and to the provisions under which it would have the power to require the consolidated company, as it can now the separate companies, to supply gas, and incandescent as well as arc lights, to those justly entitled to them.

There was some difference of opinion among the directors of the gas company upon the advisability of increasing the capital stock in case of consolidation. It was admitted that the credit of the company was good, and that it could borrow at a low rate of interest. Its last dividend was eight per cent. Well aware that an undue enlargement of capital in such cases is likely to obstruct the benefits which otherwise might result from a union of the companies, the Board intimated that its action would depend, in some degree, upon the amount of capital proposed, and requested more definite information after further deliberation on the subject by the company. The votes of the stockholders, which were put in evidence, in reference to engaging in the electric business and obtaining authority so to do, were faulty and not sufficiently explicit to meet the requirements of the statute. Furthermore, the companies had entered into no agreement in writing, such as the Board in previous cases had deemed an essential condition, setting forth the terms of consolidation, although it appeared that they had come to a verbal understanding.

The hearing was formally closed, but the consideration of the case was postponed to allow the companies time for such further action as they might deem expedient.

The stockholders of the gas company have held another meeting and passed the requisite votes. The directors have decided that it is inexpedient to increase the capital stock, and have authorized the treasurer to borrow the funds necessary to purchase the existing electric plant. A binding contract was also executed for the sale and transfer of the franchises, property and shares of stock of the People's Electric Company to the gas company.

In view of these additional facts, and under all the circumstances

of the case, the Board believed the petition should be granted, and so ordered.

METHUEN.

The petition of the Lawrence Gas Company for authority to engage in the business of furnishing electricity for light and power in the town of Methuen, the appeal of the Methuen Gas Light Company from the refusal of the selectmen to grant it permission to erect poles and run wires in the streets of Methuen, and the appeal of the Lawrence Gas Company from the decision of the selectmen of Methuen giving permission to George H. Drew and others to dig up the streets for the purpose of laying pipes for gas and erecting poles for electric wires, were heard together at the town hall in Methuen.

Notice of the hearing was published in the "Methuen Transcript," and mailed to all the parties named. The selectmen were present and the Lawrence Gas Company was represented by counsel. No one appeared for the Methuen Gas Light Company, or for George H. Drew and associates.

It is important to note the order of events to which the attention of the Board was directed.

By chapter 49 of the Acts of 1877, the Lawrence Gas Company was authorized to extend its pipes and to supply gas in Methuen, and was engaged in so doing at the time of the application of Messrs. Drew and others to the selectmen.

Nov. 12, 1887, the Board authorized the Lawrence Gas Company to supply electric light in Lawrence, and on June 17, 1889, the company applied for authority to supply electric light in Methuen.

June 22, 1889, George H. Drew and others, who stated it as their intention to organize the Methuen Gas Light Company, were granted permission by the selectmen, without a public hearing, to do all things necessary to conduct in said town the business of supplying gas and electric light: but, upon the condition expressed in the grant, the works were to be constructed and ready for operation within one year. From this grant the Lawrence Gas Company took the appeal referred to above.

Sometime prior to July 3, 1890, the Lawrence Gas Company

petitioned the selectmen of Methuen for authority to erect and maintain poles and wires for electric lighting, and to lay pipes for supplying gas, the former permission having been lost and no record of its issue appearing upon the records of the selectmen. After a public hearing on this petition on July 22, the selectmen on August 2 granted permission to the company to lay and maintain pipes for gas, and September 6 permission to erect and maintain poles and wires for electric lighting, each grant being subject to certain conditions.

July 15, 1890, the Methuen Gas Light Company, composed apparently of persons other than those mentioned above, having completed its organization, applied to the selectmen for leave to erect and maintain poles and wires for electric lighting. On September 6 the application was refused, and the petitioners appealed to this Board.

It was shown that, up to the time of the hearing, nothing had been done by George H. Drew and associates toward complying with the conditions of their permit, and the selectmen unanimously expressed a wish that the grant should not stand.

An examination showed that the Lawrence Gas Company had surplus electrical apparatus ample to supply the present needs of Methuen, that no additional outlay would be needed except for line construction, and that there would be no necessity for any new capital stock. The wires of the Lawrence company already extended to the Methuen line, and but a short extension would be needed to supply all the lights which were likely to be demanded. The company had fully complied with the conditions accompanying the grant to lay gas mains, and would be easily able to do the same with those in the grant to construct electric lines.

No appeal was taken from either grant to the Lawrence company, and the right of this company to lay gas mains in Methuen had thereby become vested, and the Board had no power to overrule or defeat it.

It was conceded that no second company could successfully compete with it in the supply of gas or electricity in this territory. Upon a full examination, the Board was satisfied that the Lawrence company possessed every facility for supplying the people of Methuen with electric lights of superior quality, and at lower rates

than could reasonably be expected of a small company operating only in Methuen.

It was accordingly voted to grant the petition of the Lawrence Gas Company, to dismiss the appeal of the Methuen Gas Light Company, and that the appeal from the decision of the selectmen upon the petition of George H. Drew and others be sustained, and the authority thereby granted be revoked.

NORTHAMPTON ELECTRIC LIGHTING COMPANY, APPELLANT.

This was an appeal by the Northampton Electric Lighting Company from permission given by the mayor and aldermen of Northampton, March 20, 1891, to H. C. Hawks, as follows : —

“ *Voted*, To grant permission to H. C. Hawks of Boston, Mass., to use the streets of the city for the erection of poles and stringing electric wires, both for city and commercial uses.”

The appeal was filed March 23, 1891, notice issued March 31, and the case was heard April 17, in Northampton. The appellant and Mr. Hawks, the appellee, were represented by their respective counsel, and the city solicitor appeared in support of the action of the mayor and aldermen.

The city contains about 15,000 population, and has a gas company and one electric light company, the appellant, incorporated in 1886. Since the electric lighting company began business it has lighted the streets with arc lamps. Its last contract having expired April 1, 1891, it is now supplying the same, 93 in number, temporarily at the request of the city. It has also furnished commercial lights, both arc and incandescent, to all desiring the same.

In response to an invitation by the city, proposals were made, in the early part of the year, to do the public lighting on the basis of supplying 90 to 110 arc lamps of 1,200 nominal candle power, for a term of five years, burning from dark to midnight according to the moon schedule, so-called, or about twenty-five nights each month. The appellee, by proposal dated Feb. 19, 1891, offered to supply them at \$58.50 each, the firm of J. E. Lambie & Co. of said city, for about the same price, and the appellant for \$70 each.

But the offer of the appellee was based on the further express

consideration that he should receive, according to his understanding of it, a valid and perpetual franchise to use the streets of the city for the erection of poles and stringing wires for the supply of electric lights to private customers as well as to the city. And such, it is evident from the broad language of the vote above quoted, the city intended to give. A contract, bearing date April 17, 1891, the day of the hearing, was executed by the appellee and the city, acting through its committee, in substantial conformity with his offer, the lights to be supplied within six weeks "after the acceptance of said contract by said city-government."

Although the committee by the vote put in evidence was authorized to contract with a "company," it will be assumed that the city would accept the contract should such further action be deemed necessary.

For the purpose of considering the wisdom and legality of the grant to the appellee, the evidence in the case should be carefully examined. To persons familiar with the history of electric lighting, the difference in price between the bids of the appellant and the appellee would seem a low estimate of the value for all purposes, commercial and speculative, of such a franchise. The appellee testified that he should retain an interest in the plant during the five years, but would not operate it personally, as he should continue in his present business; that other parties were to own it with him and furnish the capital. The names or residence of these parties he declined to give, though earnestly requested to do so. He stated that he expected to supply both arc and incandescent lights to private consumers, and that without the right to do so he would be unwilling to accept the contract for the public lighting. There are reasons, some of which have been stated by the Board in a former case, why the permission to the appellee is unwise. Admitting, what is extremely doubtful, that the statutes ever intended that an individual should be given the right to occupy the streets for the purpose of doing a general lighting business, he certainly ought not to transfer his license. The permission is personal to him. Such rights should be held and exercised by persons whose names and residence are known, so that they can readily be found if need be. The names should appear in the grant. The real persons in interest, the actual owners, should be

declared, as they are the ones who are and ought to be held responsible for negligence or misfeasance. Once admit that the right is assignable by sale, levy, devise or inheritance, it may then pass into the possession of persons wholly unreliable and unfit to perform the duties pertaining to it. Permanent grants of such a nature are best vested in some corporate continuing body.

It is difficult to consider the accepted proposal apart from the purchase of the franchise, but it may be due the parties and the public to examine the case in its general bearings.

As appeared by the evidence, the plant of the appellant company is not only sufficient for its present work, city and commercial, but is capable of supplying 1,000 additional incandescent lights and 25 more arc lights. It was not seriously alleged at the hearing that its equipment was faulty, that its price for incandescent light was too high, that its management had been extravagant, or its dividends excessive.

The appellee proposed to erect and equip a new plant adequate for all the street lighting, and for the commercial lighting so far as he may obtain it, using water power, and charging private consumers the same price as the city for arc lights. It did not appear that his price for incandescent light would be less than that paid to the appellant. While it is true that electrical apparatus can be bought more cheaply now than in 1886, it is believed that a plant capable of doing the street and commercial lighting would cost considerably above the estimate of the appellee. Although he had made no contract therefor, the appellee testified that he could obtain water power, supplemented with steam, for a term of five years, at the rate of \$25 per horse power a year. Even on this basis the estimate of operating expenses submitted to the Board by the appellee assures no adequate profit on the street lighting, omitting as it does real estate or rent of premises, insurance, cost of superintendence, taxes and other expenses, and some of the items included are much smaller than are found in actual practice.

There being so many resident stockholders of the electric lighting company it is evident that the appellee would at best get but a share of the incandescent business. There would then be two plants, each doing a portion of the lighting, and neither

yielding its owners a fair profit, if any. The saving of \$5,000 or \$6,000 in the expenses of the city during the five years life of the contract, while a considerable sum, is of little importance when compared with the waste and loss which must follow the unnecessary duplication of plants and a profitless contest for that period. It is a just principle, clearly acknowledged in the recent statute authorizing municipal lighting, that capital wisely expended for the purpose of supplying the public needs is entitled to be protected against destructive competition, even by a municipality. The rights and interests of the city, the stockholders and the citizens ought to be considered together, and the consumers in the end are thereby the gainers.

The history of electric lighting in Northampton, as shown by the evidence, is instructive. About five years ago there were two rival electric plants in operation in that city. After a few months of sharp competition, low prices and no profits, some of the stockholders of the appellant company, at their own expense, and presumably to give value to their stock, bought and removed the other plant. A like result would probably follow a similar experiment. The Board believes that the Legislature intended, by the recent acts, that all the reasonable and permanent advantages of competition are to be gained through the regulating powers thereby conferred upon it. The statutes assume that cities and towns, as well as private citizens, are entitled to light at reasonable prices. The only avowed object in granting the franchise appealed from was to secure a reduction in rates. The mayor alone or twenty customers, if the price is thought too high, may bring petition before the Board, asking that the price be reduced. This remedy ought to be invoked, if the existing company has suitable equipment and is well managed, before the community is subjected to the danger and inconvenience of a second system of poles and wires. Any lack of apparatus, or waste in the methods of business, any unnecessary cost of power, — indeed, everything relating to the economy and quality of the work of a company are rightfully taken into account in fixing the price.

If it is clearly made to appear that, by different manipulation or by the use of other kinds of power, machinery or materials, a considerable saving can be effected, and that these improvements

might be adopted by a new company, it would compel the inquiry whether the present one might not fairly be expected to acquire them, or submit to prices based on their possession.

In reviewing the facts in this case, the Board could discover no just ground for establishing another plant in the city at the present time. The Board therefore sustained the appeal, and revoked the permission granted by the mayor and aldermen.

MUNICIPAL OWNERSHIP.

Chapter 370 of the Acts of 1891, entitled "An Act to enable cities and towns to manufacture and distribute gas and electricity," commonly called the municipal ownership law, will be found in the appendix.

The Board has endeavored, by the means at its command, to ascertain what action has been taken throughout the Commonwealth in respect to the business contemplated by the act.

There are 210 towns and cities in the State with a population of 1,500 or more, and official information has been received from 205 of these. It appears that 180 towns have taken no action.

The towns of Framingham, Norwood, Hingham, Plymouth and Wellesley have appointed committees to investigate the subject.

In the city of *Malden* an order was adopted by the common council Oct. 15, 1891, for the appointment of a committee "to ascertain if it be expedient for Malden to adopt municipal lighting," but this order was tabled in the board of mayor and aldermen.

The city council of *Brockton*, by concurrent votes, passed the following resolution which was approved by the mayor Sept. 15, 1891:—

Whereas, Under the provisions of chapter 370 of the Acts of 1891, cities have been authorized, after certain prescribed municipal action, to establish plants for the manufacture or distribution of gas or electricity for furnishing light for municipal use or for the use of such inhabitants as may require and pay for the same; and

Whereas, In our opinion this city should not delay in the taking of the preliminary steps prescribed in said act, towards what we think will prove of great benefit to the city and its inhabitants:—

Resolved, That, in the opinion of the city council of the city of *Brockton*, it is expedient to exercise the authority so conferred in said chapter

Both branches of the city council of *Chicopee*, by concurrent votes, Nov. 23 and 30, 1891, passed the following:—

Voted, That it is expedient for the city of *Chicopee* to construct, purchase or establish and maintain within its limits, one or more plants for the manufacture and distribution of electricity for furnishing light for municipal use, and for the use of such of its inhabitants as may require and pay for the same.

The town of *Everett* has had a series of adjourned town meetings where one of the articles to be acted on was the question of the establishment of an electric plant, but a final adjournment was had without acting on that subject. A warrant for a new town meeting on Jan. 26, 1892, has been ordered, which contains an article calling for a vote upon this question.

At a meeting of the legal voters of *Marblehead*, June 22, 1891, it was voted, 180 to 8, "that it is expedient to exercise the authority conferred by the act," and a committee was elected "to consider the requirements of the town, in the matter of an electric plant, and to report as to cost of the same with recommendations as to the system to be adopted." This committee is to report at the annual meeting in March, 1892.

At the last annual meeting in *Methuen*, there was an article in the warrant to see what action, if any, the town would take towards the establishment of an electric light plant, but it was voted, 113 to 50, to pass over the article. No other action has been taken.

At a town meeting in *North Attleborough*, June 30, 1891, the warrant contained an article relative to adopting the provisions of the act, which was acted upon favorably by a vote of 206 to 35.

At a special town meeting in *Reading*, Oct. 2, 1891, it was voted, 94 to 14, that "it is expedient for the town to exercise the authority conferred by the act."

In *Spencer*, at a meeting, July 21, 1891, the following article was in the warrant: "to see if the town will vote that it is expedient to exercise the authority conferred by the act." Under this article the matter was referred to a committee, and no further action taken until October 6, when on a similar article the vote was 3 yes to 283 no.

At the annual meeting in *Weymouth*, March 4, 1889, the subject of the establishment by the town of an electric light plant was considered but "indefinitely postponed."

In *Fall River*, a committee having reported on Oct. 5, 1891, against the advisability of establishing a municipal plant, the city council adopted the recommendations of the committee.

At a town meeting in *Whitman* on Dec. 30, 1891, it was voted, 57 to 5, that it was expedient for the town to exercise the authority conferred in section 1, chapter 370 of the Acts of the Legislature of Massachusetts for the year 1891, "to purchase, establish and maintain within its limits a plant for the manufacture and distribution of electricity for furnishing light for municipal use and for the use of such of its inhabitants as may require and pay for the same," as provided for in said chapter. A committee was also appointed to consider the question and report at a future meeting.

At a town meeting in *Hudson* on July 1, 1891, it was voted, 30 to 7, to exercise the authority conferred by the act, and on Sept. 2, 1891, a similar vote was passed, 60 to 11. At a meeting on September 16, a committee was appointed "to investigate relative to the entire subject of municipal lighting by gas or electricity." On November 11 a majority of this committee reported, "recommending to the citizens of this town that as a corporate body their best interests demand that they do not embark in the business of electric lighting," and it was voted, 84 to 60, to adopt this report.

In *Wakefield*, March 6, 1891, the selectmen were instructed to petition the Legislature "for authority to build a gas or electric light plant, or both, with authority to manufacture light for public use and also to sell light for private use." On July 9 it was voted, 216 to 26, "expedient for the town to exercise the authority conferred by chapter 370 of the Acts of 1891." On Nov. 3, 1891, the selectmen were instructed "to petition the Legislature to enact a special law empowering the town of Wakefield to erect a plant for the purpose of generating electric light for municipal, commercial and individual purposes, without purchasing any existing plant." At a meeting November 3, the selectmen were made a committee "to confer and negotiate with the Citizens' Gas Light Company to ascertain for what amount and upon what terms said company will sell its gas and electric light plant, or any part thereof, to the town and what it will cost the town." At an ad-

journalment of this meeting on November 17, the selectmen reported that they had conferred with the Citizens' Gas Light Company and that "the town could purchase its plant for \$140,000." No further action was taken.

In *Melrose*, at a meeting March 3, 1890, a committee was appointed to investigate "in relation to establishing an electric light plant." At an adjournment, March 24, the committee reported favorably, and were directed "to investigate farther with the special view of ascertaining what legal objections, if any, existed." The committee petitioned the Legislature for a special act giving the town "authority to establish or build a gas or electric plant, or both, and sell light for public and private use;" and at a town meeting on Feb. 16, 1891, this action was approved, and a committee appointed to urge the passage of the bill. The town also by unanimous vote endorsed the legislative petition for a general law. The committee previously appointed has not been discharged but has made verbal report favorable to the project. At a meeting, June 8, it was by vote of 11 to 1 "declared expedient for the town to exercise the authority" conferred by the municipal ownership act, and "the committee on electric lighting was directed to inquire and report whether, in their judgment, it is expedient and desirable for the town to erect and maintain a plant for the generation and distribution of electricity for public and private lighting; also, what will be the probable cost of a complete electric light plant suitable for the necessities of the town." At the meeting of Nov. 3, 1891, under an article (No. II.) in the warrant, "to see if the town will accept the provisions of chapter 370, Acts of 1891, and pass any votes in connection therewith which may be deemed expedient," the following votes were passed:—

That further consideration of Art. II. be postponed to an adjourned session of this meeting, to be held the same evening as the next town meeting shall be held for the transaction of town business;

That this meeting be adjourned until the evening when the next town meeting shall be held for the transaction of town business, said meeting to be called to order thirty minutes before the time designated for the next town meeting held in the evening for the transaction of town business;

That the selectmen be instructed to insert in the warrant for the next meeting called for the transaction of town business, an article covering such action of the town as may be necessary to carry into effect an ac

entitled: "An Act to enable cities and towns to manufacture and distribute gas or electricity."

The Board is informed that these votes were passed to give the committee time to investigate still further and report a plan; also to make sure that, having placed the article in the warrant and before the people, it might not be construed as a failure to act under the law.

March 27, 1890, the city council of *New Bedford* adopted an order appointing a committee "for the purpose of investigating as to the cost of establishing, maintaining and operating an electrical plant in this city, for the purpose of supplying the several departments, including the streets, with electric lights; also to obtain information regarding the experience of other cities, and any other knowledge relating thereto." Sept. 11, 1890, they made a report from which it appeared that they were not prepared to recommend the construction of a plant by the city. The report was received and filed, in concurrence, and no action has since been taken.

The town of *Peabody* voted on June 18, 1891, 614 to 87, and again on Aug. 20, 1891, 551 to 22, that it was "expedient for the town to exercise the authority conferred in section 1, chapter 370 of the Acts of 1891, to construct, establish and maintain within its limits a plant for the manufacture and distribution of electricity for furnishing light for municipal use and for the use of such of its inhabitants as may require and pay for the same, as provided in said chapter." On the latter date a committee was appointed to "investigate what further action should be taken by the town for the purpose of establishing in the town a plant for the manufacture and distribution of electricity for use in lighting the streets and public buildings of the town, and to report a suitable location for such plant, and the cost of establishing, maintaining and operating the same." At a meeting Sept. 29, 1891, the committee reported, recommending "that the sum of \$47,000 be appropriated for the purpose of establishing an electric-light plant; that a committee of five be appointed with full power; that the town authorize them to buy land, set poles, string wires in the streets, to take stone and material for grading from the gravel pit owned by the town, and do all other acts necessary to be done; that the town treasurer be authorized, with the approval

of the selectmen, to hire for this purpose the sum of \$47,000 in such manner and on such terms as they deem best for the town." It was voted, 225 to 10, to adopt the recommendations. The matter of incandescent lighting was referred to the same committee, to report thereon at the next annual meeting.

The town of *Danvers*, at a special meeting on April 16, 1888, voted, 221 to 9, to appropriate \$15,000 for the purchase of an electric-light plant. Chapter 378 of the Acts of 1891, entitled "An Act to legalize the action of the town of *Danvers* in establishing an electric light plant, and to authorize said town to generate and distribute electric light and power," was accepted by the town by a vote of 60 to 6 at a meeting on the 20th of October, 1891. Since 1888 this town has maintained and operated an arc-light plant for the purpose of lighting the streets, but has done no commercial lighting. No return or report of any kind has been received from the town of their lighting operations and it is doubtful if any is yet due the Board. The special act for the benefit of *Danvers* was passed after the general municipal ownership law and did not include the important provisions of the latter respecting accounts and returns. The course of this town has aroused extended interest on the part of private corporations and other towns in the question of municipal ownership of lighting plants, and definite and reliable information will undoubtedly prove of great value to the public. It is respectfully suggested, therefore, that the provisions applying to other towns engaged in this business respecting accounts, returns and the jurisdiction of this Board be extended to *Danvers*.

Chapter 370 above referred to imposes important duties and powers upon this Board whenever a town assumes to exercise the authority conferred. The Board would be greatly aided in its work by a provision requiring any action by the town under this chapter to be communicated to it.

VIOLATION OF LAWS.

Notices have been sent to the attorney-general, in compliance with the statutes, of the alleged violations of the laws:—

The Gardner Gas Light Company, by not having an office in Gardner, where its works are located, and by having refused to

submit its books to the Board on application, in violation of section 1, chapter 346, Acts of 1886.

The Citizens' Gas Light Company of Quincy, Gardner Gas Light Company, Natick Gas Light Company, Electric Light and Patent Flooring Company of Amesbury, Framingham Electric Company, Milford Electric Light and Power Company, Nantucket Electric Light Company, Natick Electric Company, and the Suburban Light and Power Company of Boston, in not making returns to the Board, as required by law.

ACCIDENTS.

The statute in relation to accidents caused by gas or electricity, section 2, chapter 350, Acts of 1888, is as follows: —

All companies and individuals engaged in the business of manufacturing and selling gas or electricity for light or fuel, shall make a written report within twenty-four hours to the board of gas commissioners of every accident caused by the gas or electricity manufactured or supplied by them, whereby an employee or any other person shall suffer bodily injury, or loss of life, or be rendered insensible, stating the time, place and circumstances of the accident, and such other facts in relation thereto as the board may require; and the board shall present in its annual report an abstract of all such cases. The board shall personally investigate all cases which it may deem to require investigation.

During the year 1891, there have been five persons injured by electricity from electric light wires, one of them fatally. Thirty persons have been injured by illuminating gas, sixteen of them fatally. Of the latter number, two committed suicide. The following is an abstract of the cases: —

Accidents from Electricity.

John Tierney, an employee of the Consolidated Hand Method Lasting Machine Company, was killed shortly after 3 o'clock p.m., Jan. 10, 1891. The plant of the above-named company is a private one, owned by Bradley & Woodruff, who arranged with the Boston Electric Light Company to connect their system of wiring with the circuit of the electric company, so that when the Bradley & Woodruff dynamo was not running, current could be had from the electric company. At the time of the accident the current of the electric company had been switched on to the wires of the machine company. Tierney was at work at an iron lathe on the top floor

of the premises, 234 Congress Street. Over the lathe was suspended by an insulated wire, an incandescent lamp socket, out of which the lamp had in some way been broken. Before screwing in a new lamp, Tierney touched the socket with his fingers to see if he could feel any shock or current, and getting none he took hold of the socket firmly with his right hand. The muscles of his hand closed upon the socket so hard that to release it a fellow workman struck it from his grasp with a hammer. Tierney fell to the floor, apparently lifeless. A physician and the medical examiner said that death must have been instantaneous. The floor upon which Tierney stood seemed to be thoroughly soaked with oil, and under his machine was a piece of zinc or other metal upon which he was probably standing at the time. Whether his left hand was in contact with the machine at the time when he took hold of the lamp with his other hand is not certain. When these lamps were run from the electric light company's current it was by an alternating current, which entered the building through a transformer. After the accident the transformer was removed, and a test made showed a contact between the primary and the secondary coil, due to the expansion caused by the heating of the internal parts. The many expansions and contractions had removed the insulation on the wires. The latest style of transformer has remedied and removed former defects in construction by a change in form and in the leading-in wires, and will prove safe if properly installed and connected.

John Todd, an employee of the North Attleborough Steam and Electric Light Company, attempted, while standing on a very wet earth floor, to hang an iron lamp-holder on a projection of the bed-plate of a one horse-power arc motor that was placed six feet from the ground, and received a portion of the current which passed through him into the earth, burning his hand quite badly. He had been repeatedly warned of the danger arising from the motor.

R. H. Parker, employed as a trimmer by the Worcester Electric Light Company, received a slight burn on his hand while running a ground on one of the Company's line wires. The accident was so slight as to cause Mr. Parker no loss of time or serious inconvenience.

The Lowell Electric Company reports that, on May 16, at 5.30 P.M., an accident occurred, due to the crossing of an unused telegraph wire with their arc light wire. This cross caused the iron front of a building to become charged with electricity and the line men were notified. A telegraph man cut the unused wire, but failed to notice that the stretch between himself and the cross was not tied to the pins. This stretch of wire fell into the street and struck a horse, killing it instantly, and slightly injuring Frank Burns who went to its assistance.

The Boston Electric Light Company reports that, on December 24, at about 4.45 P.M., William A. Roust, twenty years of age, a trimmer of arc lamps, employed by them, while endeavoring to fix a lamp located opposite 315 Dorchester Avenue, South Boston, fell from the post to the sidewalk. Examination showed that Roust having finished his days work was passing the lamp and thought that it was not working properly, so mounted the post to fix it. He was noticed by Messrs. Kelly and Finnegan, wood dealers at 328 Dorchester Avenue, to start the lamp, and put it out and start it again, making a motion as if to reach for the switch, and to immediately fall to the sidewalk. He was taken to the City Hospital, where an examination showed both hands superficially burned in the palms, and two cuts on the right elbow as large as half dollars. Mr. Roust said that he had no distinct recollection of what he was doing, or where he was at the time of injury, but was hurt, he thinks, while putting up a globe. Some ten years ago he had a sunstroke. He was discharged from the hospital, well.

Accidents from Gas.

The Fall River Gas Works Company reports that John J. Finnegan, aged thirty-two and unmarried, who was employed by the Fall River Water Works, was found dead on January 13, at about 9 A.M., in a pit near the gasometer, owned by the Fall River Gas Company at the corner of Davoll and Turner streets. It was part of the duty of the deceased to read the water meter placed there. There was no sign of an explosion, and no gas leakage could be discovered. An autopsy made gave no indication as to the cause of the death. An examination of blood made by Professor Wood of the Harvard Medical School showed that death

resulted from gas poisoning. Water gas was being made at the time.

The Northampton Gas Light Company reports that Joseph L. Myers, a guest at the Mansion House in the city of Northampton, committed suicide by inhaling illuminating gas from the burner in the room occupied by him during the night of March 3. Examination showed that Myers was a commercial traveller, about thirty-five years of age, who came to Northampton from Springfield, March 2, and registered at the above hotel as J. L. Myers, New York, and was assigned to room 53. After his return from visiting a business house in search of employment he spent the greater part of the evening writing letters to friends and chatting with the landlord and guests. At about nine o'clock, he visited a store in the vicinity of the hotel and purchased some five feet of half-inch rubber tubing, returned after a short time to the hotel, and retired to his room about midnight. At eight o'clock the next morning, a strong odor of gas was discovered in the hall, and an investigation by the night clerk showed that the odor came from room 53. The door was forced open and Myers was found in bed, covered up and dead. He had wheeled his bed as near the gas jet as possible, placed one end of the rubber tube over the opening of the burner, and, taking the other end in his mouth, turned on the gas. The contents of letters written to friends and the deliberate preparations made it clear that this was a case of suicide.

The Dorchester Gas Light Company reports that on April 2, Thomas Duran, an employee of the water department of the city of Boston on general repairs and services, was rendered unconscious from foul air and the escape of gas from a gate box, while attempting to shut off water. It appeared from examination that Duran crawled into the gate box before ventilating it, after being advised by a fellow workman not to do so. He remained unconscious for an half-hour, but recovered from the effects of the gas in a few days.

Miss Bertha Everett, twenty-two years of age, arrived at the Parker House, Boston, about 11.20 P.M., April 27, in company with friends, who shortly left her. She was assigned to a room, leaving an order to be called at 6.30 in the morning, as she

intended to continue her journey to Haverhill, Mass., where her relatives resided. On calling at her room at the above hour, no answer being received an entrance was effected by breaking open the door. She was found lying upon the bed, the body rigid, but warm. Life had been extinct probably an hour. There was a strong odor of gas in the room; the burner, a three-foot tip, in good condition, was fully open. The room has a capacity of thirteen hundred feet. It is believed that death was accidental, probably caused by blowing out the gas.

Charles Oltsch, aged thirty-five, stopping at the boarding-house of Mrs. F. A. Barringer, Pittsfield, was found in his room, at about 9 o'clock on the morning of August 23, groaning, breathing heavily, and unconscious. The gas burner was partially opened and gas escaping. The room contains about twelve hundred cubic feet and has one window, partially open at the time; also one door, fitting loosely. A physician was summoned, and Oltsch removed to another room, where windows were opened and hypodermic injections administered. At about 4 o'clock P.M. he had sufficiently recovered to converse. He was a delicate man, but fully recovered from the effects of the gas in a few days.

Janos Greskovitz, a native of Poland, aged thirty, was found insensible in his room at the Burbank Hotel, Pittsfield, at 6 o'clock A.M., July 9. The gas was flowing from a partially open burner. The keyhole was stopped with paper, and the window tightly closed. Greskovitz explained, after his recovery, that he stopped the keyhole in order to prevent a very bad smell coming in from the hall, as he supposed. The room contains about sixteen hundred cubic feet. He was sent to the House of Mercy (hospital) at about 9 A.M., and discharged July 10.

Michael McNamara and Thomas Hamilton, day foreman and laborer, employed at the works of the Worcester Gas Light Company at Worcester, were suffocated from inhaling gas in the valve house of said company on the 16th of May. The men were sent by the superintendent to make a small connection for a jet photometer on the outlet pipe of the No. 1 gasholder to test the quality of the gas. For this purpose it was necessary to drill a three-eighths inch hole, as the plug in the pipe formerly used had become rusted. For this work the foreman sent Thomas Hamilton into the cellar of

the valve house, but without an assistant as is usual. On the return of the foreman to look after the work, he found Hamilton overcome by gas and called out for Patrick Ryan, another workman. McNamara at once jumped into the cellar of the valve house and tried to pull Hamilton out, without taking the precaution to stop the flow of gas through the newly drilled three-eighths inch hole, although soap was found near which had been taken by the man sent to do the work. On the arrival of Ryan, in answer to the call, he found McNamara trying to pull Hamilton out and fast being overcome. Ryan then endeavored to assist McNamara but became unconscious in a few moments and was discovered by Superintendent Wetherbee and the clerk of the works. After filling the hole with soap, the three men were immediately removed to the surface, but McNamara and Hamilton were dead. Ryan was sent to the hospital and soon recovered. Superintendent Wetherbee was rendered partially unconscious while assisting in removing the men. Foreman McNamara was thoroughly conversant with his work and had been in the employ of the company for some eighteen years. Water gas was being made at the time of the accident.

Henry S. Taylor, aged sixty-three years, a clothing merchant of Pittsfield, was found dead in his bed at the house of his son on Wendell Avenue, on Sunday morning, September 6, having been asphyxiated by illuminating gas. He retired to his room at about 11.45 P.M., and was found soon after eight the next morning. The room contains about nine thousand cubic feet. There are two windows and one door in the room, all of which were tightly closed. The fixture was of the candle type and operated by electricity, and according to statements of the family had never worked perfectly. It is supposed that in using the attachment to extinguish the light the gas was not shut off. Water gas was being made at the time of the accident.

Edward Burgess, aged about thirty-five, registered at Hotel Columbus, 112 Commercial Street, Boston, at 11.40 P.M., May 30, 1891, from Marlborough, Mass., and was shown to room 12 on the third story. He was found in the forenoon of June 2, lying in bed, dead. An odor of gas in the house was traced to room 12, which was found full of gas, the cock half turned on.

The gas fixture was in good condition, having a burner marked "two-foot;" a half turn of the cock shut off certainly half the flow of gas, allowing two or possibly three feet to escape. The physicians who were called said that he had been dead two days or more. The man, who paid in advance for one night's lodging, appeared sober, and was given no liquor at the hotel. The death was probably accidental. The room contains about seven hundred and seventy cubic feet, with one window fitting loosely and one door fitting tightly.

Eugenio Gallo and Gtorgio Niccolo, sailors, registered at the Hotel Columbus, corner of Richmond and Commercial streets, Boston, at 10 30 o'clock P.M., July 8. The next morning at 6 o'clock when the door of their room was opened, Gallo was found unconscious and Niccolo slightly affected by inhaling illuminating gas. Gallo was removed to the City Hospital where he remained two days and was discharged, well. Niccolo remained about the hotel for a few hours and returned to his vessel, apparently all right. The room occupied has two beds, two windows and two doors, and contains about nine hundred cubic feet. There was one three-foot burner fully open. It appeared that Niccolo got out of bed after midnight and after smoking blew out the gas and retired. Gallo was a delicate man, about forty-four years old. Niccolo was very robust and about twenty-five years of age.

On the night of July 12, H. S. Stron and Axel Janssen, sailors on the U. S. S. Newark, took a room at the Hotel Eastern, Causeway Street, Boston, and retired, asking to be called at 5 A.M. At that time they answered the call but remained in their room. About 10 o'clock the men were found by the wife of the proprietor, the room being filled with gas. Janssen was lying on the bed, dead, and Stron was on the floor gasping for breath. Stron was removed to the Massachusetts General Hospital and was discharged well on July 14. The room contains about eighteen hundred cubic feet, and has two large windows and two doors all closed tightly. The burner was a three-foot one in good condition. In the room a half-empty bottle of liquor was found, but the night clerk says that the men were sober when they registered.

July 8 about noon a woman registered at the Victoria Hotel, corner of Dartmouth and Newbury streets, Boston, as Mrs. J. Clifford, Charleston, S. C., and was assigned to room 58. At about 10 o'clock A.M., July 11, the chambermaid, finding the door of the room locked, and being unable to open it, notified the office. The door was opened and the occupant found dead, upon the bed. The room was filled with gas, both burners being wide open. A lace handkerchief had been crowded into the keyhole of the door leading to the adjoining room, and pieces of cloth had been put into the keyhole of the door leading into the hallway. Cloth had also been crowded closely under the doors with some thin instrument like a knife, and especial care had been taken, by crowding in newspapers, to stop all ventilation around the windows. The physicians said that the woman had been dead since the evening before the discovery of the body.

John F. Lynch of Attleborough registered at the City Hotel, Taunton, August 4, and at 2 o'clock in the morning was discovered suffering from the effects of inhaling gas. He was cared for by the night clerk of the hotel, and in a few hours was all right. On retiring he had blown out the gas instead of turning it off.

James G. Ryan of Salem was made seriously ill by illuminating gas on Sunday afternoon, September 27. It appeared that Mr. Ryan went to his chamber and took with him a young son. Both lay down on the bed and quickly fell asleep, the child sleeping but a short time. On waking, the child took hold of the gas stop-cock and began turning it backward and forward, but soon got off the bed, leaving the burner open, and went into another room. Over an hour afterward Mrs. Ryan detected a strong odor of gas, and, opening the door of the chamber, found her husband on the bed, face downward, his body rigid. She immediately opened the windows, turned off the gas and summoned a physician, who worked over Mr. Ryan for some time and succeeded in restoring him to consciousness, but he suffered from the effects of the gas for several days.

James Reardon and Michael Lordon were found about 6.30 A.M. on October 27, the former in bed, dead, and the latter on the floor unconscious, in the room occupied by them at 199 Harrison

Avenue, Boston. They went to bed, as near as can be ascertained, about 11 o'clock. Failing to answer when called by the keeper of the boarding-house at the usual hour, 6.30 o'clock, the door was forced open and the men found. Both were laboring men; Reardon about seventeen years old, of slight build, and Lordon about thirty, of rugged physique. When the room was entered the gas burner was found about one-third open and the room filled with gas. The door and window both fitted tightly. The room contains about six hundred cubic feet. Lordon was removed to the City Hospital, and was discharged from there October 31, well.

Daniel McElligeth, aged forty, a fruit peddler, roomed at 7 Briggs Place, Boston, and was found by the lessee of the house about 1.30 P.M. on Saturday, November 14, lying on the floor of his room, partially unconscious and suffering from gas poisoning. It was found that McElligeth went to his room about 9 P.M. on Friday, November 13, and being missed by his friends, an inquiry at his boarding-place led to an investigation. The room contains about fifteen hundred cubic feet and has two large windows and a door fitting loosely; there are two five-foot burners, one of which was fully open. McElligeth cannot account for the gas having been left flowing. After a few days' treatment at the hospital he was discharged well.

On the night of December 10, after midnight, C. H. McDowell of Swansboro', N. C., arrived at the United States Hotel, and registered as John Williams, Providence. The next morning about 10 A.M., after repeated calls, a failure to respond awakened the suspicions of the hotel porter, who looked through the transom and saw the man lying upon the bed. The room was forcibly entered, and a three-foot gas burner found fully open and the room filled with gas, rendering McDowell insensible. He was removed to the Emergency Hospital, and thence to the City Hospital, where he remained until December 18, when he was discharged, well. The room contains about eight hundred and fifty cubic feet. McDowell says that he probably blew out the gas on retiring.

On the night of Dec. 24, at about 11 o'clock, a young man about twenty-one years of age registered at the Hotel

Marion, corner of Pleasant and Eliot streets, Boston, as Tom Holt, and was assigned to a room on the fourth floor. On the afternoon of the 25th, about 3.30 o'clock, the son of the proprietor noticed a strong smell of gas, and traced the same to Holt's room. An entrance was effected and the occupant found insensible, with the burner wide open. A physician was summoned and finding a slight movement of the heart endeavored to restore consciousness, but was unsuccessful, and the man died shortly afterward. From information obtained it appears that the name of the young man was Thomas Herbert, and that he came from Providence, R. I. The medical examiner believes the case to be suicide. The young man was well dressed, and evidently in good health.

The Brockton Gas Light Company reports that on the evening of Dec. 25, two girls, aged ten and eight years, occupied room 6 at the Hotel Elmore. Before retiring one of the girls turned off the gas; the other tried to lock the door of the room, but was unable to do so on account of a defect in the lock. The girl then turned on the gas, under the impression that it would light by so doing. Not feeling the effects of the escaping gas both girls retired and were soon asleep. The night porter in his rounds about eleven o'clock discovered an odor of escaping gas, and notified the proprietor (the father of the girls) who, failing in his attempts to get an answer from the occupants of the room to his repeated calls, opened the door and removed the girls to another room; the effects of the gas were but temporary, and the girls soon recovered. The room contains about fifteen hundred and fifty cubic feet.

On January 18, George Clark, Margaret Clark and Mary E. Gillis were found dead in bed in the basement of 21 North Grove Street, Boston. Clark was about twenty-six years of age, Margaret Clark about thirty-five and Mary E. Gillis not over five. The discovery of escaping gas was made by Officer Glawson of the third division while patrolling his beat, and traced to the above house. Entering, he aroused the inmates of the house above the basement, two of whom were in such a stupefied condition from the effects of gas that they had to be carried to the street. The other inmates reached the street without assistance, and

on breathing the fresh air fully recovered. The escaping gas came from a drain pipe running from a sink in the room occupied by the Clark family and connected with an old drain constructed of planks, used as a part of the former sewage system of Parkman Street. A break was found in the gas main in Parkman Street, about one hundred feet from the house, and about one foot above the so-called surface sewer connected with the house, at a point where by decay the sewer had fallen in. This removed the necessary support for the gas main and caused the break. The old so-called surface sewer had been placed there before 1836. The gas main was laid more than fifteen years ago, but no defect or break had occurred at that point before, so far as known, and no smell of gas had been noticed in the house. The dwelling is old fashioned and had three tenants.

The Fall River Gas Works Company reports that on March 1 several persons were slightly affected by an escape of gas from a broken main, one man having been made insensible for a short time. The main, which was a six-inch one, was probably broken by the passage of a heavy engine some weeks before. The smell of gas had been noticed for some days and the freezing of the ground probably caused the gas to pass into the houses, on the line of the main.

Peter Jones, a bootblack, occupying the basement of the four-story brick building 22 Chapman Place, corner Bosworth Street, Boston, entered the building on the 7th of December a little after 7 o'clock A.M., and detecting the smell of gas opened the windows in the basement. Satisfied that the room had been freed from gas he lighted a match, causing an explosion. He was thrown against the wall and after being assisted to the sidewalk was sent to his home. Just before Jones entered the building William Haynes, the occupant of a room in the fourth story, went in, and noticing a strong odor of gas, opened the windows on each landing as he went up. Shortly after opening the windows he heard the explosion and at once started for the street which he reached in time to see Mr. Jones coming from the basement. The glass in the front of the first floor occupied by John Mack & Co. was completely shattered, the floor torn up and the walls badly

torn. The basement occupied by Mr. Jones was also damaged. The gas came into the building under the front wall on Chapman Place from a broken gas main. The break in the pipe was caused by a settling in the street in front of the building.

The following cases, which were omitted from the report of 1890, have been furnished the Board by Dr. S. W. Abbott, Secretary of the State Board of Health, and are here inserted in order to make the report of these cases as complete as possible.

John S. Fuller of Wareham, aged 61, took a room at the hotel No. 41 Kneeland Street, Boston, at 11.30 p.m. on Jan. 4, 1890, and was found dead in bed at 10 a.m. on January 5, with the room full of gas, the cock being half open. The man was just recovering from a spree and the medical examiner made a return of accidental death.

August Jno. Mulsen, aged 27, was found dead in his room in Boston on Aug. 10, 1890, with the gas turned on and all the windows and transoms shut. He had no money and the medical examiner reported the case as one of suicide.

The total number of deaths caused by inhaling illuminating gas in the United States during the year 1891, as reported to the Board from various sources, was two hundred and eleven. In the reports thus given, it appears that of this number thirty-three were cases of suicide, and one hundred and seventy-eight are supposed to have been accidental. The accidental deaths from illuminating gas, omitting those in this State, occurred in the following cities and towns:—

New York City, 32; Chicago, Ill., 34; San Francisco, Cal., 16; Baltimore, Md., 6; Washington, D. C., 10; Philadelphia, Pa., 7; Sioux City, Ia., and Omaha, Neb., 4 each; Toledo, O., Minneapolis, Minn., Brooklyn, N. Y., and Milwaukee, Wis., 3 each; Hartford, Conn., Terre Haute, Ind., Norfolk, Neb., Hoboken, N. J., Detroit, Mich., Providence, Pa., Poughkeepsie, N. Y., and Des Moines, Ia., 2 each; St. Joseph, Mo., Wellsville, Newport, and Columbus, O., Joliet and Urbana, Ill., Los Angeles and Sacramento, Cal., McKeesport, Carlisle and Reading, Pa., Woonsocket and Pawtucket, R. I., Plainfield, Atlantic City, Asbury Park and Long Branch, N. J., Yonkers and Albany, N. Y., Marquette, Mich., Waterbury and Bridgeport, Conn., Memphis, Tenn.,

Lincoln, Neb., Burlington, Ia., St. Paul, Minn., and Superior, Wis., 1 each.

Following is the number of fatal accidents occurring in each month during the year: January, 23; February, 17; March, 17; April, 17; May, 17; June, 21; July, 11; August, 8; September, 19; October, 22; November, 21; December, 18.

Of the fatal accidents from gas two occurred where oil gas is made, six where coal gas only is made, seventy-one in places where there is only water gas and ninety-nine where both coal and water gas are used.

The following table shows the corporate name, the localities supplied, the capital and the par value of the shares of the companies in active operation on the thirtieth day of June last:—

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Adams Gas Light Co., . . .	Adams, . . .	\$17,300	\$25
Amesbury & Salisbury Gas Co., . . .	Amesbury, . . .	60,000	100
Amherst Gas Co., . . .	Amherst, . . .	25,000	100
Arlington Gas Light Co., . . .	Arlington, . . .	70,000	100
	Belmont, . . .	—	—
	Winchester, . . .	—	—
Athol Gas & Electric Co., . . .	Athol, . . .	25,000	100
Attleborough Gas Light Co., . . .	Attleborough, . . .	46,400	100
Bay State Gas Co.,* . . .	— . . .	500,000	100
Beverly Gas Light Co., . . .	Beverly, . . .	60,000	100
Boston Gas Light Co., . . .	Boston (city proper), . . .	2,500,000	500
Brockton Gas Light Co., . . .	Brockton, . . .	100,000	100
Brookline Gas Light Co., . . .	Brookline, . . .	500,000	100
	Boston (Brighton District), . . .	—	—
Cambridge Gas Light Co., . . .	Cambridge, . . .	700,000	100
	Somerville (in part), . . .	—	—
Charlestown Gas Co., . . .	Charlestown, . . .	500,000	50
	Somerville (in part), . . .	—	—
	Medford (in part), . . .	—	—
Chelsea Gas Light Co., . . .	Chelsea, . . .	30,000	100
Chicopee Gas Works, . . .	Chicopee Centre, . . .	30,000	—
Citizens' Gas Light Co. of Quincy, . . .	Quincy, . . .	53,000	100
Citizens' Gas Light Co. of South Reading, . . .	Wakefield, . . .	95,300	100
	Reading, . . .	—	—
	Stoneham, . . .	—	—
Clinton Gas Light Co., . . .	Clinton, . . .	60,000	500
Cottage City Gas & Electric Co., . . .	Cottage City, . . .	25,000	100

* Sells only to other companies.

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
Danvers Gas Light Co., . . .	Danvers, . . .	\$20,000	\$50
Dedham & Hyde Park Gas & Electric Light Co., . . .	Dedham, . . . Hyde Park, . . .	100,000 —	50 —
Dorchester Gas Light Co., . . .	Boston (Dorchester District), . . . Milton, . . .	400,000 —	100 —
East Boston Gas Co., . . .	Boston (E. Boston), . . .	220,000	25
Easthampton Gas Co., . . .	Easthampton, . . .	30,000	100
Fall River Gas Works Co., . . .	Fall River (in part), . . .	288,000	100
Fitchburg Gas Co., . . .	Fitchburgh, . . .	100,000	50
Framingham Light, Heat & Power Co., . . .	Framingham, . . .	75,000	100
Gardner Gas Light Co., . . .	Gardner, . . .	34,000	100
Gloucester Gas Light Co., . . .	Gloucester, . . .	80,000	50
Greenfield Gas Light Co., . . .	Greenfield, . . .	50,000	50
Haverhill Gas Light Co., . . .	Haverhill, . . . Bradford, . . .	75,000 —	50 —
Ipswich Gas Light Co., . . .	Ipswich, . . .	16,000	100
Jamaica Plain Gas Light Co., . . .	Boston (Ward 23), . . .	200,000	100
Lawrence Gas Co., . . .	Lawrence, . . . Methuen, . . . North Andover, . . .	500,000 — —	100 — —
Lee Electric Co., . . .	Lee, . . .	20,000	100
Leominster Gas Light Co., . . .	Leominster, . . .	50,000	100
Lexington Gas Light Co., . . .	Lexington, . . .	20,000	100
Lowell Gas Light Co., . . .	Lowell, . . . Dracut, . . . Tewksbury, . . .	500,000 — —	100 — —
Lynn Gas & Electric Co., . . .	Lynn, . . . Swampscott, . . .	375,000 —	100 —
Malden & Melrose Gas Light Co., . . .	Malden, . . . Melrose, . . . Medford (in part), . . . Everett, . . .	220,000 — — —	100 — — —
Manufacturers' Gas Light Co., . . .	Fall River (in part), . . .	50,000	100
Marblehead Gas & Electric Light Co., . . .	Marblehead, . . .	40,000	100
Marlborough Gas Light Co., . . .	Marlborough, . . .	50,000	100
Middleborough Gas & Electric Co., . . .	Middleborough, . . .	80,000	100
Milford Gas Light Co., . . .	Milford, . . . Hopedale, . . .	72,300 —	100 —
Nantucket Gas Light Co., . . .	Nantucket, . . .	36,000	100
Natick Gas Light Co., . . .	Natick, . . .	20,000	100
New Bedford Gas and Edison Light Co., . . .	New Bedford, . . .	550,000	100
Newburyport Gas & Electric Co., . . .	Newburyport, . . .	140,000	100
Newton & Watertown Gas Light Co., . . .	Newton, . . . Watertown, . . . Wellesley, . . . Weston, . . .	200,000 — — —	100 — — —

CORPORATE NAME.	Localities Supplied.	Capital.	Par Value.
North Adams Gas Light Co., .	North Adams, .	\$50,000	\$100
Northampton Gas Light Co., .	Northampton, .	50,000	25
North Attleborough Gas Light Co.,	North Attleborough,	68,100	100
	Attleborough Falls, .	-	-
	Wrentham, . . .	-	-
Norwood Gas Light Co., . . .	Norwood, . . .	12,000	100
Pittsfield Coal Gas Co., . . .	Pittsfield, . . .	62,500	100
Plymouth Gas Light Co., . . .	Plymouth, . . .	40,000	100
Roxbury Gas Light Co., . . .	Boston (Roxbury District), . . .	600,000	100
Salem Gas Light Co., . . .	Salem, . . .	300,000	100
	Peabody, . . .	-	-
South Boston Gas Light Co., .	Boston (South Boston), . . .	440,000	100
Southbridge Gas & Electric Co.,	Southbridge, . . .	40,000	50
Spencer Gas Co.,	Spencer, . . .	85,000	100
Springfield Gas Light Co., . .	Springfield, . . .	500,000	100
Stoughton Gas & Electric Co., .	Stoughton, . . .	24,000	100
Taunton Gas Light Co., . . .	Taunton, . . .	80,000	50
Waltham Gas Light Co., . . .	Waltham, . . .	140,000	100
Webster Electric Co., . . .	Webster, . . .	45,000	100
	Dudley, . . .	-	-
Westfield Gas Light Co., . . .	Westfield, . . .	54,000	100
Williamstown Gas Co., . . .	Williamstown, . .	20,000	100
Woburn Gas Light Co., . . .	Woburn, . . .	45,100	100
Worcester Gas Light Co., . . .	Worcester, . . .	500,000	100

The company at Fitchburg furnishes water, that at Gloucester maintains a wharf and supplies water, and that at Springfield furnishes steam for heating. In addition to these, the companies in Amherst, Athol, Beverly, Brookline, Charlestown, Chelsea, Clinton, Cottage City, Easthampton, Fitchburg, Holyoke, Lawrence, Lee, Lynn, Middleborough, New Bedford, Newburyport, Newton, North Adams, Southbridge, Spencer, Stoughton, Wakefield, Waltham, Webster and Westfield, furnish electric light.

The following table shows the names of the owners of gas works not owned by gas companies, the localities supplied, and the estimated value of the plant:—

Chicopee Manufacturing Co.,	Chicopee Falls,	\$25,000 00
Holyoke Water Power Co.,	Holyoke,	100,000 00
Otis Co.,	Ware,	10,000 00

The following companies have bonds and notes outstanding:—

Amherst,	\$18,500 00
Athol,	25,000 00
Bay State (Boston),	4,512,000 00
Beverly (special stock),	11,800 00
Beverly (notes),	19,605 00
Brockton,	112,000 00
Brookline,	350,000 00
Charlestown,	34,500 00
Chelsea,	70,000 00
Citizens' (Quincy),	54,350 51
Citizens' (Wakefield),	75,616 97
Clinton,	65,000 00
Cottage City,	5,730 26
Danvers,	3,000 00
Dedham,	9,000 00
Easthampton,	1,000 00
Fitchburg,	66,000 00
Framingham,	75,400 00
Gardner,	22,850 00
Greenfield,	1,500 00
Haverhill,	42,500 00
Ipswich,	8,985 00
Jamaica Plain,	42,500 00
Lawrence,	200,000 00
Lee,	16,242 52
Lexington,	67 00
Lowell,	30,000 00
Lynn,	103,500 00
Malden,	7,753 41
Marblehead,	6,200 00
Middleborough,	80,000 00
Natick,	8,500 00
New Bedford,	165,300 00
Newburyport,	16,000 00
Newton,	161,000 00
North Adams,	45,800 00
North Attleborough,	47,670 00
Pittsfield,	26,500 00

South Boston,	\$48,000 00
Southbridge,	13,500 00
Spencer,	85,000 00
Springfield,	50,000 00
Waltham,	49,000 00
Webster,	32,454 24
Westfield,	21,500 00
Williamstown,	11,503 60
Worcester,	40,000 00

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value of the stock held within the Commonwealth: —

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at Par of Stock held in Massachusetts.
Adams,	8	8	\$17,300
Amesbury,	15	6	27,800
Amherst,	37	37	25,000
Arlington,	54	41	44,100
Athol,	8	2	2,000
Attleborough,	21	18	45,600
Bay State (Boston),	8	6	600
Beverly,	38	38	60,000
Boston,	6	4	2,600
Brockton,	44	42	99,400
Brookline,	136	126	439,200
Cambridge,	398	350	628,200
Charlestown,	242	230	470,950
Chelsea,	130	124	289,700
Chicopee,	3	3	30,000
Citizens' (Quincy),	5	3	52,800
Citizens' (Wakefield),	46	44	94,400
Clinton,	25	25	60,000
Cottage City,	10	10	25,000
Danvers,	22	21	11,950
Dedham,	40	33	66,650
Dorchester,	26	22	367,800
East Boston,	132	112	195,375
Easthampton,	41	34	26,700
Fall River,	19	13	12,000
Fitchburg,	36	33	91,300
Framingham,	19	17	42,300
Gardner,	5	4	24,000
Gloucester,	75	71	76,550
Greenfield,	37	27	43,700
Haverhill,	58	52	63,950
Ipswich,	28	28	16,000
Jamaica Plain,	137	131	189,600

NAME OF COMPANY.	Whole Number of Stockholders.	Number of Stockholders resident in Massachusetts.	Value at Par of Stock held in Massachusetts.
Lawrence,	206	184	\$147,700
Lee,	11	11	20,000
Leominster,	60	55	48,200
Lexington,	19	18	19,900
Lowell,	266	228	449,600
Lynn,	165	160	367,200
Malden,	147	125	187,100
Manufacturers' (Fall River), .	7	7	50,000
Marblehead,	29	23	32,500
Marlborough,	12	12	50,000
Middleborough,	13	13	80,000
Milford,	53	51	71,700
Nantucket,	52	48	34,600
Natick,	21	21	20,000
New Bedford,	354	322	493,700
Newburyport,	97	87	131,600
Newton,	167	164	194,200
North Adams,	40	29	46,500
Northampton,	43	32	31,200
North Attleborough,	36	32	67,100
Norwood,	4	3	10,000
Pittsfield,	55	45	56,600
Plymouth,	29	25	37,900
Roxbury,	8	4	400
Salem,	254	236	277,900
South Boston,	28	24	43,800
Southbridge,	59	57	39,000
Spencer,	17	17	85,000
Springfield,	120	112	475,500
Stoughton,	6	6	24,000
Taunton,	107	100	75,000
Waltham,	106	98	129,600
Webster,	18	18	45,000
Westfield,	21	18	47,700
Williamstown,	3	3	20,000
Woburn,	46	45	44,600
Worcester,	187	177	465,400

The following statistics exhibit the aggregate receipts and expenses of all the companies in the State, compiled from the items relating to the manufacture and sale of gas in the last two returns made to the Board:—

	YEAR ENDING JUNE 30.	
	1890.	1891.
RECEIPTS:—		
For gas sold by meter,	\$4,432,899 30	\$5,040,438 78
For gas supplied to public lamps,	327,438 05	292,544 62
From sales of coke,	344,897 46	266,581 10
sales of tar,	117,603 71	157,182 52
sales of ammoniacal liquor,	29,636 68	22,812 31
rent of meters,	1,265 28	1,657 65
rent of gas stoves and engines,	1,910 84	4,553 83
rent of gas lamps,	2,076 70	2,314 76
public lamps other than gas lamps,	12,788 53	9,273 25
other sources,	474 49	592 47
Total,	\$5,270,991 04	\$5,797,950 79
EXPENSES:—		
1. Coals,	\$1,299,030 83	\$1,170,720 54
2. Enrichers,	140,017 84	266,437 69
3. Purifying materials,	30,734 13	28,576 76
4. Water,	23,701 50	22,352 38
5. Wages at works,	633,707 66	547,062 30
6. Repairs and maintenance of works (including renewal of retorts),	240,580 22	235,428 06
7. Apparatus and machinery,	52,130 15	64,769 34
8. Wages of meter takers, clerical labor in distribution, and salary or commission of collectors,	98,350 74	105,827 93
9. Repairs, renewals, and maintenance of mains and service pipes,	130,431 95	151,411 55
10. Repairs and renewals of meters,	52,986 83	47,597 36
11. Lighting and repairing (gas lamps only),	10,823 59	12,081 45
12. Lighting and repairing, and materials used for other lamps,	12,319 15	8,734 78
13. Directors' allowances,	10,593 28	16,890 02
14. Salaries of officers,	143,902 06	144,705 68
15. General salaries,	105,116 22	100,210 84
16. Rent of offices,	10,961 61	12,119 09
17. General office expenses,	41,713 20	44,098 98
18. Taxes,	268,949 68	272,884 78
19. Fire insurance,	9,419 61	9,684 10
20. Law expenses,	27,879 51	34,630 09
21. Claims,	10,890 77	26,256 90
22. Bad debts,	17,002 37	8,976 53
23. Incidental expenses,	39,068 44	26,492 08
24. Gas bought,	242,561 64	842,332 69
Total,	\$3,662,372 98	\$4,200,281 92

	FOR YEAR ENDING JUNE 30.	
	1890.	1891.
Leaving an apparent net profit on their gas business of	\$1,608,618 06	\$1,597,668 87
They have also received for interest,	16,185 00	24,644 58
They have also received for rents, etc.,	151,063 43	211,414 51
They have also received as profits from electric lighting,	110,871 40	143,240 78
Making a total,	\$1,886,637 89	\$1,976,968 74
From these receipts were paid interest on bonds and loans,	\$144,128 98	\$521,885 81
Dividends,	1,017,785 00	1,026,950 00
Other items,	107,243 67	35,380 60
	\$1,269,157 65	\$1,584,216 41
Leaving a surplus for the year of	\$617,480 24	\$392,752 33

Seven of the companies appear not to have earned expenses, and twelve others have not earned sufficient to warrant the declaration of any dividend.

The receipts for gas sold by meter show an apparent increase of about \$608,000; but the sales made by various Boston companies to one another, and thus counted twice as sold, reduce this amount to about \$8,000. Receipts from public lamps continue to fall off, this year showing a decrease of about \$35,000.

In the appendix will be found, under date of June 30, 1891, the separate balance sheets of the companies, as taken from the annual returns, with corrections as made by the Board after examination and correspondence with the officers of the several companies.

Aggregates from these balance sheets and those in the returns of 1890 show the following facts : —

	FOR YEAR ENDING JUNE 30.	
	1890.	1891.
ASSETS : —		
Real estate, machinery, street mains and meters,	\$22,529,075 72	\$23,075,991 07
Cash on hand,	557,087 67	618,663 53
Due for gas,	491,658 38	492,861 55
Other accounts due,	112,365 77	262,167 81
Materials, etc.,	535,548 04	815,315 10
Notes receivable,	224,594 53	164,623 31
Investments,	475,559 16	356,376 29
Electric assets,	1,650,427 31	2,182,642 57
	\$26,576,266 58	\$27,968,641 23
LIABILITIES : —		
Capital stock,	\$13,158,300 00	\$13,361,000 00
Bonds,	449,970 00	1,148,556 08
Notes payable,	5,541,732 93	5,862,007 42
Unpaid bills,	141,121 55	371,503 40
Unpaid dividends,	20,353 50	19,851 50
Deposits,	32,752 41	38,864 13
Interest due and unpaid,	3,945 80	10,228 88
Other items,	42,784 99	49,857 04
	\$19,390,961 18	\$20,861,868 45
Reserved and depreciation funds,	618,289 68	520,386 14
	\$20,009,250 86	\$21,382,254 59
Surplus,	6,567,015 72	6,586,386 64
	\$26,576,266 58	\$27,968,641 23

Of these companies —

56 ¹ show an aggregate surplus of	\$6,684,922 97	\$6,824,571 26
11 ² show an aggregate deficit of	117,907 25	238,184 62
Leaving total net surplus, as shown above,	\$6,567,015 72	\$6,586,386 64
Which, added to reserves carried as liabilities,	618,289 68	520,386 14
Would show an actual surplus of	\$7,185,305 40	\$7,106,772 78
Equivalent to per cent on capital of about	53	53

The following table shows the valuation of the property of each company as assessed by the local assessors :—

NAME OF COMPANY.	Assessed Value.	NAME OF COMPANY.	Assessed Value.
Adams,	\$14,100	Lexington,	\$3,278
Amesbury,	18,700	Lowell,	993,620
Amherst,	6,450	Lynn,	225,500
Arlington,	35,150	Malden,	133,700
Athol,	15,000	Manufacturers' (Fall	
Attleborough,	26,200	River),	63,900
Bay State (Boston),	526,300	Marblehead,	13,800
Beverly,	54,225	Marlborough,	14,000
Boston,	4,355,800	Middleborough,	23,200
Brockton,	84,276	Milford,	76,400
Brookline,	432,100	Nantucket,	6,000
Cambridge,	816,100	Natick,	12,200
Charlestown,	662,700	New Bedford,	441,200
Chelsea,	310,750	Newburyport,	136,200
Chicopee,	30,000	Newton,	351,100
Chicopee Falls,	10,000	North Adams,	24,000
Citizens' (Quincy),	13,500	Northampton,	51,800
Citizens' (Wakefield),	59,000	North Attleborough,	57,300
Clinton,	75,000	Norwood,	11,000
Cottage City,	10,400	Pittsfield,	78,600
Danvers,	4,000	Plymouth,	22,350
Dedham,	32,500	Roxbury,	633,500
Dorchester,	298,200	Salem,	303,000
East Boston,	220,000	South Boston,	386,300
Easthampton,	33,500	Southbridge,	21,000
Fall River,	259,100	Spencer,	22,400
Fitchburg,	101,325	Springfield,	544,570
Framingham,	—	Stoughton,	8,500
Gardner,	—	Taunton,	64,400
Gloucester,	79,000	Waltham,	193,000
Greenfield,	29,000	Ware,	9,150
Haverhill,	164,000	Webster,	31,800
Holyoke,	202,000	Westfield,	52,500
Ipswich,	5,400	Williamstown,	3,750
Jamaica Plain,	193,300	Woburn,	45,100
Lawrence,	454,000	Worcester,	576,000
Lee,	10,600		
Leominster,	20,000	Total,	\$15,295,794

* Not returned.

Included in the above are certain companies which have electric light plants, and the following shows the assessed value of such wherever separately returned :—

Amherst,	\$2,000
Athol,	6,000
Beverly,	33,300
Brookline,	10,500
Clinton,	28,800
Cottage City,	8,160
Easthampton,	4,000
Fitchburg,	58,000
Holyoke,	102,000
Lawrence,	50,449
Lee,	8,600
Lynn,	95,500
Middleborough,	15,000
New Bedford,	136,200
Newton,	82,100
North Adams,	8,000
Webster,	21,500
Westfield,	16,500
<hr/>	
Total,	\$686,609

The value of the gas plants, as assessed by the local assessors, is then in round numbers \$14,000,000, as there are electric plants at Charlestown, Chelsea, Newburyport, Southbridge, Stoughton, Wakefield and Waltham, which are not given in the above table.

The following table shows the amount paid by each company for taxes, after deducting the amounts belonging to the electrical departments and the amount for each thousand feet of gas sold :—

NAME OF COMPANY.	Amount of Taxes Paid.	Amount Per Thousand sold.
Adams,	\$441 69	\$0 0873
Amesbury,	588 88	1259
Amherst,	108 37	1323
Arlington,	1,026 89	1701
Athol,	157 35	0638
Attleborough,	496 96	0675
Bay State (Boston),	8,300 27	0133
Beverly,	557 56	0779
Boston,	78,950 65	0558
Brockton,	1,405 12	0823
Brookline,	4,497 78	0786
Cambridge,	20,497 49	1625
Charlestown,	10,279 48	1354
Chelsea,	5,042 87	1662
Chicopee,	532 10	0603
Citizens' (Quincy),	254 68	0385
Citizens' (Wakefield),	375 52	0665
Clinton,	409 05	0529
Cottage City,	193 93	0965
Danvers,	81 31	0413
Dedham,	524 67	0939
Dorchester,	6,058 74	0901
East Boston,	5,009 59	1321
Easthampton,	524 00	1298
Fall River,	6,371 59	1498
Fitchburg,	1,177 12	0718
Gardner,	470 76	5224
Gloucester,	1,501 90	1048
Greenfield,	472 62	1319
Haverhill,	2,733 09	0484
Holyoke,	1,848 22	0384
Ipswich,	78 08	0517
Jamaica Plain,	4,517 63	1326
Lawrence,	9,390 70	1381
Lee,	47 54	3087
Leominster,	416 79	2320
Lexington,	164 33	1539
Lowell,	18,415 22	0821
Lynn,	4,723 72	0726
Malden,	4,312 78	1320
Manufacturers' (Fall River),	1,090 52	0821
Marblehead,	451 99	1303
Marlborough,	305 92	0677
Middleborough,	1	-
Milford,	1,353 59	1357
Nantucket,	129 29	0765
Natick,	419 76	1147

¹ Return covered six months only.

NAME OF COMPANY.	Amount of Taxes Paid.	Amount Per Thousand sold.
New Bedford,	\$2,901 74	\$0 0722
Newburyport,	1,188 56	1357
Newton,	4,378 67	0859
North Adams,	717 98	0460
Northampton,	857 85	0770
North Attleborough,	1,630 88	1288
Norwood,	207 90	1881
Pittsfield,	1,697 43	1241
Plymouth,	339 66	0815
Roxbury,	13,011 60	0802
Salem,	5,886 62	1651
South Boston,	6,300 71	0893
Southbridge,	218 03	1671
Spencer,	886 58	1054
Springfield,	7,369 70	0937
Stoughton,	62 71	1662
Taunton,	1,762 75	0465
Waltham,	1,823 06	0661
Ware,	150 29	0375
Webster,	147 58	0925
Westfield,	639 10	0991
Williamstown,	110 41	2442
Woburn,	953 74	1229
Worcester,	12,758 12	1025
	<hr/> \$272,709 78	

The total sum paid by the companies for taxes, including State inspection, after apportioning to electric account that part of the gas companies' taxes belonging to their electrical departments, was \$272,709.78, an average of 7 cents per thousand feet of gas sold; being an increase over the previous year in the total amount of \$2,785.02, and a decrease of 1.2 cents per thousand feet sold.

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table:—

NAME OF COMPANY.	Rate per Cent.	Amount of Dividends.	Amount per Thousand Sold.
Adams,	20	¹ \$3,460	\$0 6839
Amesbury,	4	2,400	5132
Amherst,	—	² —	—
Arlington,	6	4,200	6957
Athol,	—	² —	—
Attleborough,	10	4,640	6302
Bay State (Boston),	10	50,000	0799
Beverly, { Special Stock,	6	708	—
{ Ordinary Stock,	6	3,550	—
Boston,	7 ¹ / ₂	187,500	1325
Brockton,	7 ¹ / ₂	7,000	4098
Brookline,	7	31,500	—
Cambridge,	10	70,000	5550
Charlestown,	10	50,000	—
Chelsea,	6	18,000	—
Chicopee,	12	3,600	4078
Citizens' (Quincy),	6	2,580	3899
Citizens' (Wakefield),	—	² —	—
Clinton,	2	1,200	—
Cottage City,	—	² —	—
Danvers,	—	² —	—
Dedham,	—	² —	—
Dorchester,	8	32,000	4757
East Boston,	10	22,000	5800
Easthampton,	10	3,000	7433
Fall River,	9	25,920	6090
Fitchburg,	10	10,000	—
Framingham,	—	² —	—
Gardner,	—	² —	—
Gloucester,	³ 9	6,138	4282
Greenfield,	⁴ 6	120	0335
Haverhill,	10	7,500	1328
Ipswich,	—	² —	—
Jamaica Plain,	9	18,000	5285
Lawrence,	8	40,000	—
Lee,	—	² —	—
Leominster,	2	1,000	5567
Lexington,	3	600	5619

¹ In addition to this dividend, a rebate is allowed to mills owning stock. This rebate amounted to \$2,410.01.

² No dividend declared.

³ An additional dividend of three per cent. was declared from the earnings of wharf property.

⁴ On preferred stock only.

NAME OF COMPANY.	Rate per Cent.	Amount of Dividend.	Amount per Thousand Sold.
Lowell,	12	\$60,000	\$0 2672
Lynn,	9	33,750	—
Malden,	8	17,600	5385
Manufacturers' (Fall River),	10	5,000	3764
Marblehead,	—	1—	—
Marlborough,	—	1—	—
Middleborough,	—	1—	—
Milford,	10	7,230	7249
Nantucket,	4	1,440	8522
Natick,	—	1—	—
New Bedford,	7	38,500	—
Newburyport,	6	8,400	—
Newton,	8	16,000	—
North Adams,	6	3,000	—
Northampton,	8	4,000	3591
North Attleborough,	6	4,086	3228
Norwood,	—	1—	—
Pittsfield,	12	7,500	5483
Plymouth,	5	2,000	4801
Roxbury,	10	60,000	3699
Salem,	6½	19,500	5470
South Boston,	5	22,000	3118
Southbridge,	5½	2,200	—
Spencer,	—	1—	—
Springfield,	8	40,000	5087
Stoughton,	—	1—	—
Taunton,	10	8,000	2109
Waltham,	7	9,800	—
Webster,	—	1—	—
Westfield,	8	4,320	—
Williamstown,	—	1—	—
Woburn,	8	3,608	4651
Worcester,	8	40,000	3213
	—	\$1,024,550	—

¹ No dividend declared.

PRICE OF GAS.

The following companies have reduced the price of gas during the year ending June 30, 1891 : —

Brookline,
Citizens' (Wakefield),
Dorchester,
Malden,

Roxbury,
South Boston,
Springfield.

At Spencer, the price of gas has been raised from \$1.25 to \$1.60.

The following pages show the price charged by the several companies, June 30, 1891 ; the average candle-power as shown by the tests made by the State inspector of gas ; and the average price, per thousand feet sold by meter, received in the two years ending June 30, 1891.

The gas made is coal-gas, except where otherwise noted.

NAME OF COMPANY.	Average Candle- power.	Gross Price.	REMARKS.	Average Price, 1889-90.	Average Price, 1890-91.
Adams,	18.73	\$3 00	Twenty per cent. discount, if paid within 5 days from date of bill,	\$2 40	\$2 41
Amesbury,	22.06	2 50	Houses and stores, \$2.25 and \$2; carriage shops, \$1.75; cotton mills, \$1.50, less 15 cents; gas engines, \$1. Water gas.	1 73	1 74
Amherst,	38.15	6 00	If bill amounts to \$5, discount 5 per cent.; to \$10, 10 per cent.; to \$20, 15 per cent.; to \$50, 20 per cent.; to \$75, 25 per cent. Oil gas, with 5 to 8 per cent of air.	5 16	5 48
Arlington,	17.40	2 75	Discount: fifty cents per M, if bill is settled within 20 days; 5 per cent. additional to small mills, etc.; 10 per cent. to large mills, etc.	2 75	2 75
Athol,	15.85	3 00		2 37	2 35
Attleborough,	17.63	2 00	Discount of 40 cents per M to consumers of 10,000 feet and upward; 20 cents per M to consumers of over 1,000 feet and less than 10,000 feet a quarter. \$2 per M net to gas stoves.	2 00	2 00
Beverly,	17.00	2 60	Discounts: 10 cents per M allowed to monthly consumers at the end of the year, if their bills have exceeded \$1,000, and have been promptly paid. Coal gas and water gas.	2 31	2 31
Boston,	21.40	1 30		1 23	1 21
Brockton,	17.60	2 25	Discounts: On 1,000 feet and under, 10 cents per M; on 1,000 to 5,000 feet, 15 cents per M; 5,000 feet and over, 25 cents per M; if paid within 10 days.	2 09	2 06
Brookline,	17.05	1 90		1 94	1 90
Cambridge,	17.04	1 80	Discount 20 cents per M, if paid within 25 days from date of bill. Large con- sumers, \$1.50 net.	1 67	1 59
Charlestown,	17.16	2 00	Discount 25 cents per M, if paid in 15 days. Coal gas and water gas, . . .	1 72	1 72
Chelsea,	18.43	2 00	One dollar and eighty-five cents to consumers of over \$250 worth per annum. \$1.75 to consumers of over \$750.	1 96	1 94
Chicopee,	17.86	1 80	Discount 50 cents per M on bills paid on or before the 10th of the month, . . .	1 80	1 82
Chicopee Falls,	26.75	4 00	Large consumers, \$3. Oil gas, with 15 per cent. air, . . .	3 33	3 51
Citizens' (Quincy),	16.63	3 00	Discounts: 5 per cent. on less than 1,000 feet per month, 10 per cent. on 1,000 or more, 15 per cent. on 3,000 feet or more and 33½ per cent. on gas consumed by stoves, offices, stores and public buildings.	2 42	2 02
Citizens' (Wakefield),	17.30	2 50	Discounts: Town and stores, 25 cents per M; manufacturing and gas engines, 62½ cents per M; private houses and individuals using 5,000 feet or more, 12½ cents per M.	2 48	2 01

Clinton,	16.53	2 50	Discount 10 per cent. on bills paid within 10 days. Large consumers \$1.50 and \$2, but no discount.	2 12	2 07
Cottage City,	-	2 20	Discount 20 cents per M., if paid in 5 days. Water gas (non-illuminating), . . .	1 95	1 97
Danvers,	16.60	3 00	Discount 10 per cent., if paid on or before the 15th of the month. Extra discount for mechanical purposes.	2 61	2 64
Dedham,	17.50	2 50	Discount 20 per cent., for payment before the 15th of the month,	2 28	1 92
Dorchester,	20.69	1 70	Discount 20 cents per M. on bills paid on or before the 12th of the month. Coal and water gas.	2 03	1 59
East Boston,	16.85	1 75	Discount $\frac{63}{100}$ per cent., making \$2.80 net. To the town, and consumers using 50,000 feet a year, the bills are made at \$2.50, with a discount of 4 per cent. making net price \$2.40.	1 77	1 76
Easthampton,	19.00	3 00	Discounts : 35 cents per M, if paid by the 15th of the month. Some large consumers 60 cents discount, and on bills of less than 500 feet per month discount is 10 cents per M. Water gas.	2 52	2 50
Full River,	23.03	2 00	Some special discounts,	1 57	1 51
Fitchburg,	17.84	2 00	Discount $\frac{163}{100}$ per cent. for payment before the 15th of the month. 60 cents per M, net, if paid promptly, to gas stoves. Non-illuminating water gas.	1 92	1 92
Frammingham,	-	90	Discounts vary according to amount used from 10 to 33 $\frac{1}{2}$ per cent., if paid by the 10th of the month. Pure oil gas.	-	38
Gardner,	52.85	6 00	Discount 10 per cent., if paid on or before the 15th of the month,	4 50	4 54
Gloucester,	18.00	2 00	On bills of \$2.50 per month, for dwellings 5 per cent. discount, if paid in 5 days ; on bills of \$2.50 for stores, 10 per cent.	1 81	1 82
Greenfield,	17.75	2 50	Discount 10 cents per M, if paid on or before the 10th. Day consumption, \$1.25. Discounts : 35 per cent. to consumers of 360,000 feet, 25 per cent. to manufacturers and mills ; $\frac{163}{100}$ per cent. to churches and consumers of \$25 per month ; $\frac{123}{100}$ per cent. to all others.	2 35	2 03
Haverhill,	18.30	1 50	Oil gas, with 33 $\frac{1}{2}$ per cent. air,	1 40	1 40
Holyoke,	18.02	2 00	Fifty cents per M discount on all bills paid within 15 days. City buildings 5 per cent. off net price.	1 58	1 54
Ipswich,	24.25	3 50	Twenty cents per M discount for less than 250,000 feet, if paid before the 15th of the month. Between 250,000 and 800,000 feet per year, \$1.50 less 10 cents. Over 800,000 \$1.30 net. Coal and water gas.	3 01	2 98
Jamaica Plain,	18.30	2 50	Oil gas, with 33 $\frac{1}{2}$ per cent. air,	2 00	2 01
Lawrence,	19.48	1 70	Oil gas, with 50 per cent. air,	1 41	1 41
Lee,	38.90	5 50	Discount 10 per cent. for prompt payment. A few large consumers, special rates. Oil gas, with 33 $\frac{1}{2}$ per cent. air.	5 50	5 00
Leominster,	31.05	4 00		4 00	3 94
Lexington,	29.20	6 00		5 40	5 25

NAME OF COMPANY.	Average Candle- power.	Gross Price.	REMARKS.		Average Price, 1889-90.	Average Price, 1890-91.
Lowell,	17.45	\$1 30	Discount 20 cents per M, if paid within 5 days,	Gas engines \$1.00 per M	\$1 10	\$1 10
Lynn,	18.49	1 80	Discount 20 cents per M, for payment within 10 days.		1 76	1 68
Malden,	16.64	2 00	net. Coal and water gas.		1 95	1 91
Manufacturers' (Fall River), .	17.43	2 00	Discount 20 cents per M, if paid by the 20th of the month. Factories and large consumers, 25 cents, 40 cents and 50 cents per M discount.		1 52	1 44
Marblehead,	16.70	3 00	Discount on less than 500 feet per month, 10 cents per M; on more than 500 feet and less than 1,000 feet, 25 cents per M; consumers of more than 1,000 feet, 35 cents per M. -Some large consumers 60 cents per M.		2 57	2 52
Marlborough,	21.07	2 50	Discounts: 10 per cent. if paid before the 16th of the month; 20 per cent. to the town and factories, 33 $\frac{1}{3}$ per cent. for heat and power.		2 32	2 31
Middleborough,	23.45	2 75	Discounts 10 per cent., 12 $\frac{1}{2}$ per cent., 20 per cent., Oil gas with 25 to 40 per cent. air.	-	2 54	
Milford,	17.07	2 00	Bills amounting to \$5 per month, 5 per cent. discount; \$10 a month, 10 per cent.; \$50 a month, 15 per cent.	1 96	1 86	
Nantucket,	17.00	3 00	Largest consumers, discount of 50 cents per M,	2 85	2 62	
Nauck,	17.03	2 00	Discounts: 10 cents per M, if paid on or before the 15th of the month; 20 cents per M to consumers of 10,000 feet.	2 85	1 62	
New Bedford,	17.47	2 00	Less than 4,000 feet per month 10 per cent. discount; over 4,000 feet per month 25 per cent. discount for prompt payment. Manufacturers 30 and 35 per cent.	1 52	1 57	
Newburyport,	17.45	2 50	Discounts: 20 per cent. on bills of 1,000 feet or more per month; 10 per cent. on all less than 1,000 feet per month, for prompt payment.	2 01	2 03	
Newton,	17.40	2 25	Consumption of 100,000 feet per year, \$1.90 net; 200,000 feet \$1.80; 300,000 feet, \$1.75; 400,000 feet \$1.70; day consumption by special meter, \$1.50; general consumers, 25 cents per M discount for cash in 20 days.	1 96	1 99	
North Adams,	17.32	1 85	To some consumers, \$1.60,	1 73	1 74	
Northampton,	17.48	2 00	To large consumers, 5 per cent. discount, if paid within 5 days,	1 90	1 88	
North Attleborough,	17.47	2 50	Discount 50 cents per M, if paid on or before the 16th of the month,	2 00	1 99	
Norwood,	-	3 00	If paid within 15 days, discount of 30 cents per M. Special prices to large consumers and churches.	2 43	2 44	
Pittsfield,	22.13	2 50	Discounts: 10 per cent. on bills of less than 1,000 feet per month; 20 per cent. on bills of 1,000 feet and less than 25,000; 40 per cent. on bills of 25,000 feet or over.	1 90	1 89	
Plymouth,	18.05	2 50	Water gas.	2 10		
			Special price to large consumers,			

Roxbury,	20.03	1 70	Discount 20 cents per M, if paid on or before the 15th of the month. Coal and water gas.	1 61	1 54
Salem,	18.00	2 00	Discount 10 per cent., if paid on or before the 15th of the month; 10 per cent. extra, on bills of \$100 and over.	1 80	1 76
South Boston,	18.23	1 70	Discount 20 per cent, if paid on or before the 12th of the month,	1 77	1 56
Southbridge,	25.45	3 00	Discounts: 5 per cent, to consumers of 1,000 feet; 10 per cent. to consumers of 2,000 feet and over. Oil gas with 30 to 40 per cent. air.	2 82	2 86
Spencer,	24.56	1 60	Water gas,	1 25	1 49
Springfield,	18.15	1 75	One dollar and sixty-five cents net for bills \$600 per year; \$1.50 to very large consumers; \$1.25 for gas used by city and public buildings and also for gas engines.	1 68	1 69
Stoughton,	46.10	5 50	Discount 10 per cent., if paid by the 10th of the month. Pure oil gas,	5 00	5 00
Taunton,	17.75	1 50	Over 125,000 feet per quarter, \$1.40 per M,	1 47	1 47
Waltham,	17.08	2 50	Discount 20 per cent, if paid by the 15th of the month,	1 80	1 84
Ware,	17.55	2 25	Public institutions, \$1.75,	2 31	2 24
Webster,	17.45	2 50	. . . . .	2 29	2 28
Westfield,	16.53	2 25	If more than 20,000 feet is used in year, \$2.15. Gas engines \$2.00. Discount from each of these prices for prompt payment 25 cents per M.	2 29	2 14
Williamstown,	-	6 00	Discount 5 per cent, if paid before the 10th of the month, 5 per cent. additional on bills amounting to \$5.00 per month. Pure oil gas.	5 38	5 34
Woburn,	18.53	2 00	Discount 10 per cent, if paid on or before the 15th of the month,	1 78	1 78
Worcester,	18.70	1 80	Discount of 30 cents per M, if paid on or before the 15th of the month. Coal and water gas.	1 50	1 50

The average price to consumers for coal gas, of twenty-five companies making annually more than 30,000,000 feet each, is \$1.3110 per thousand feet. The average price of the remainder of the coal-gas companies is \$1.9645, making an average for all of \$1.3557 per thousand. The average price for oil gas is \$3.7568 per thousand feet.

The average price for coal gas in 1886 was \$1.72; in 1887, \$1.66; in 1888, \$1.56; in 1889, \$1.45; in 1890, \$1.39; and in 1891, \$1.31, — a steady gain for the consumer.

The following table shows the amount of gas made in the year ending June 30, 1891, and in the year ending June 30, 1890; the amount sold by meter and to public lamps in both these years; the amount used at works and offices; and the amount of gas unaccounted for during the year ending June 30, 1891, and the percentage of unaccounted-for gas in both years:—

Coal Gas.

NAME OF COMPANY.	Gas made. Year ending June 30, 1891.	Gas made. Year ending June 30, 1890.	Gas sold by Meter. Year ending June 30, 1891.	Gas sold by Meter. Year ending June 30, 1890.	Gas sold for Public Lamps. Year ending June 30, 1891.	Gas sold for Public Lamps. Year ending June 30, 1890.	Gas used at Works and Offices. Year ending June 30, 1891.	Gas unac- counted for. Year ending June 30, 1891.	Percent- age unac- counted for. 1889-90.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Percent- age unac- counted for. 1889-90.
Adams,	6,500,000	6,800,050	5,050,000	5,156,790	—	77,812	20,000	1,421,000	21.86
Amesbury,	5,064,900	4,983,500	4,308,000	4,094,400	103,000	137,000	33,000	355,210	7.01
Arlington,	7,270,580	7,536,580	6,037,090	5,906,080	—	—	100,020	1,124,470	15.47
Attol,	2,889,030	3,083,990	2,467,000	2,094,100	—	—	229,000	198,930	6.89
Attleborough,	8,227,000	7,703,000	7,362,400	6,426,800	—	—	81,200	783,400	9.52
Bay State (Boston) ¹ ,	625,929,000	130,902,000	625,484,000	139,242,970	—	—	1,070,900	—	0.07
Beverly,	7,226,300	7,226,300	6,786,650	5,988,500	371,000	359,505	—	617,750	7.75
Boston,	21,443,553,281	21,443,553,281	41,370,060,562	1,274,873,494	44,722,560	47,460,264	—	72,242,355	4.86
Brookton,	17,484,600	17,484,600	17,083,200	14,010,800	—	—	264,000	4,804,800	8.44
Brookline,	67,573,200	61,105,100	45,836,800	40,102,700	11,253,235	13,913,204	174,400	10,180,765	21.70
Cambridge,	139,048,200	128,986,300	115,730,000	107,964,033	10,395,276	10,682,674	897,300	12,055,024	8.65
Charlestown,	87,978,000	89,883,000	65,725,193	64,450,586	10,173,282	12,152,408	1,475,000	10,469,515	11.90
Chelsea,	35,825,880	35,847,000	30,342,078	29,031,179	—	860,000	388,000	5,096,802	14.22
Chicopee,	10,856,700	10,044,000	8,801,000	8,323,600	28,964	25,388	150,000	1,878,356	17.30
Citizens' (Quincy) ² ,	9,037,100	7,133,000	5,917,500	5,469,000	1,000,000	504,000	318,700	2,100,000	23.25
Citizens' (Wakefield),	6,850,000	6,405,991	5,197,416	4,747,800	447,584	474,247	100,000	1,100,000	16.06
Clinton,	8,178,200	8,839,700	7,118,000	7,519,800	19,720	37,788	255,900	221,703	2.71
Cottage City,	2,695,000	2,245,800	1,784,000	1,548,300	225,000	150,000	—	687,000	25.48
Danvers,	2,510,900	2,161,400	1,668,000	1,666,900	—	—	40,200	903,700	20.06
Dedham,	7,385,600	5,856,300	5,856,300	5,906,900	—	427,200	248,400	1,948,300	20.87
Dorchester,	467,200,700	461,919,800	45,874,200	39,016,100	23,395,560	22,411,425	—	12,421	0.02
East Boston,	42,083,130	39,737,000	27,758,318	25,803,000	10,170,314	10,900,248	257,400	4,408,451	10.51
Easthampton,	4,015,550	4,463,530	4,039,800	3,677,150	—	—	119,650	400,000	9.97
Fall River,	46,342,700	55,031,000	39,766,400	44,213,000	2,708,109	3,246,337	—	3,802,291	8.20
Fitchburg,	18,292,800	17,520,000	15,665,800	14,999,400	720,000	670,000	580,000	1,331,900	7.28
Framingham,	72,237,000	72,237,000	1,263,000	—	—	—	140,000	780,300	34.87
Gloucester,	15,531,000	13,804,000	13,684,000	12,215,100	749,750	742,750	100,000	1,097,280	7.05
Greenfield,	4,143,100	3,682,000	3,582,000	2,900,200	—	—	70,700	488,700	11.59
Haverhill,	50,827,000	57,764,000	52,522,800	40,838,500	4,105,900	4,033,050	400,000	3,180,200	5.32

¹ Sells only to other companies. ² Includes 625,484,000 feet of gas bought. ³ Includes 101,793,000 feet of gas bought. ⁴ Includes 230,696,462 feet sold to other companies.

⁵ No gas made; all bought from Boston Gas Light Company.

⁶ Began operations Jan. 13, 1891. Leakage excessive, owing to blowing out mains. Fuel water gas.

Coal Gas — Concluded.

NAME OF COMPANY.	Gas made. Year ending June 30, 1891.	Gas made. Year ending June 30, 1890.	Gas sold by Meter. Year ending June 30, 1891.	Gas sold by Meter. Year ending June 30, 1890.	Gas sold for Public Lamps. Year ending June 30, 1891.	Gas sold for Public Lamps. Year ending June 30, 1890.	Gas used at Works and Offices. Year ending June 30, 1891.	Gas unac- counted for. Year ending June 30, 1891.	Percent- age unac- counted for. 1890-91.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	
Holyoke.	52,573,793	51,063,600	47,753,600	46,111,900	354,384	437,524	402,200	3,927,087	8.21
Jamaica Plain.	37,756,000	38,546,500	23,105,965	22,465,030	10,864,015	12,222,802	500,000	3,196,020	8.46
Lawrence.	75,300,800	73,866,000	67,981,211	69,185,300	-	-	387,400	7,041,980	9.35
Lowell.	238,543,000	239,143,000	216,312,300	216,303,500	8,213,700	8,195,900	2,377,300	12,150,700	5.09
Lynn.	73,103,300	71,131,300	65,082,200	60,112,000	-	716,000	1,418,300	8,645,600	4.94
Malden.	35,871,000	32,276,800	32,683,300	30,580,200	-	7,500	231,200	2,831,500	11.17
Manufacturers' (Fall River).	14,613,200	14,404,500	12,541,500	12,487,300	740,800	917,800	127,800	1,203,200	4.46
Marblehead.	4,865,300	4,158,300	3,030,700	2,665,600	437,700	500,000	153,100	1,234,880	5.98
Martborough.	5,541,040	4,492,000	4,492,000	4,735,400	30,200	62,300	111,000	908,140	20.34
Milford.	10,078,400	10,886,700	9,551,300	9,453,500	422,600	389,900	58,700	637,800	11.90
Nantucket.	2,234,130	2,287,140	1,263,900	1,431,400	425,900	474,561	58,650	484,380	8.99
Natick.	3,948,300	3,558,900	3,285,100	2,987,400	373,200	203,400	99,800	198,700	21.68
New Bedford.	44,251,800	44,882,900	34,563,300	36,990,100	5,610,258	6,120,324	642,400	3,463,342	7.82
Newburyport.	10,877,480	11,266,800	8,760,500	8,786,500	-	-	200,000	1,941,480	5.03
Newton.	57,033,000	52,190,200	45,074,300	41,009,900	5,884,000	5,895,100	380,100	5,634,600	17.85
North Adams.	20,407,100	22,433,800	15,227,800	16,761,700	365,000	1,926,000	506,800	4,277,500	9.12
Northampton.	12,435,400	11,890,400	11,138,500	10,396,200	-	-	118,100	1,183,870	14.35
North Attleborough.	14,164,500	13,973,600	12,648,900	12,838,600	10,900	-	235,600	1,245,444	9.52
Norwood.	-	-	1,105,100	1,394,100	-	-	-	-	8.79
Plymouth.	15,548,000	15,667,000	13,445,150	13,495,650	233,000	510,000	225,000	1,644,850	10.58
Roxbury.	4,493,400	4,214,300	4,163,900	3,974,900	-	-	67,300	258,800	9.17
Salem.	2163,339,940	3185,339,940	134,255,414	137,975,400	27,965,663	31,434,822	-	1,601,312	3.75
South Boston.	42,432,000	42,554,000	34,893,800	35,279,800	757,294	838,393	368,400	1,466,106	8.28
Spencer.	78,601,100	70,845,500	59,816,900	53,967,000	10,746,199	11,924,398	-	8,661,608	14.65
Springfield.	9,021,900	11,045,450	8,412,000	9,815,930	-	-	337,100	261,860	10.26
Taunton.	82,340,400	84,306,400	77,920,500	77,114,900	717,300	3,473,000	696,000	2,992,600	2.90
Waltham.	40,496,000	39,127,000	36,062,000	35,922,800	1,324,000	1,210,700	586,900	2,003,100	3.63
Ware.	29,982,900	28,071,300	26,413,400	25,464,600	1,152,100	1,222,600	683,000	1,751,400	4.95
Webster.	4,566,310	4,985,540	4,003,200	4,480,300	7,173	-	90,500	405,437	5.84
Westfield.	1,924,800	1,805,300	1,595,500	1,420,300	-	-	40,000	289,300	8.51
Woburn.	7,150,400	6,530,200	6,312,600	5,824,300	133,333	132,333	33,700	671,467	15.03
Worcester.	8,407,300	8,649,200	7,758,150	7,917,900	-	-	214,200	434,950	14.70
	130,650,400	126,208,300	121,307,300	115,312,200	3,203,100	3,707,000	-	6,084,000	8.23
									6.14
									5.69

¹ Not returned. ² No gas made; all bought from Boston Gas Light Company. ³ Includes 79,651,940 feet of gas bought. ⁴ Includes 1,851,200 feet used by the Otis Company.

⁵ Includes 2,275,500 feet used by the Otis Company.

The following table shows the capacity of the works, the greatest and least daily output, and date of the same for each of the companies :—

NAME OF COMPANY.	Daily Capacity of Works.	Greatest Output.	Date.	Least Output.	Date.
	Feet.	Feet.		Feet.	
Adams,	50,000	1—	1—	1—	1—
Amesbury, . . .	100,000	39,500	Feb. 4,	9,000	July 4
Amherst,	5,000	6,000	Nov. —	1,000	July —
Arlington, . . .	50,000	38,000	Dec. 20,	9,970	June 14
Athol,	25,000	19,600	Dec. 23,	2,300	July 11
Attleborough, . .	100,000	42,000	Jan. 17,	12,000	July 28
Bay State (Boston),	4,000,000	3,469,000	Dec. 13,	350,000	June 14
Beverly,	50,000	44,100	Jan. 2,	8,000	June 14
Boston,	6,000,000	5,984,297	Dec. 17,	995,553	Aug. 3
Brockton,	120,000	101,196	Dec. 24,	21,288	July 4
Brookline,	350,000	307,000	Dec. 24,	83,000	July 15
Cambridge,	1,000,000	710,000	Dec. 12,	130,000	July 4
Charlestown, . . .	500,000	385,000	Dec. 24,	112,000	July 27
Chelsea,	250,000	164,500	Dec. 24,	42,500	Aug. 18
Chicopee,	80,000	74,000	Dec. 18,	4,300	Aug. 14
Chicopee Falls, . .	1—	1—	1—	1—	1—
Citizens' (Quincy), .	70,000	46,900	Dec. 27,	9,200	June 12
Citizens' (Wakefield),	35,000	40,000	Dec. 25,	15,000	July 12
Clinton,	90,000	60,100	Jan. 1,	4,000	Sept. 15
Cottage City, . . .	60,000	34,000	Aug. 9,	0	Jan. 5
Danvers,	20,000	12,800	Dec. 28,	2,700	June 23
Dedham,	80,000	38,800	Jan. 5,	9,930	July 14
Dorchester,	300,000	287,070	Dec. 24,	90,863	July 8
East Boston,	250,000	192,155	Dec. 24,	58,415	July 6
Easthampton, . . .	40,000	40,000	Dec. 18,	4,000	July 30
Fall River,	500,000	315,400	Dec. 17,	48,700	June 14
Fitchburg,	100,000	99,000	Dec. 18,	19,200	June 14
Framingham,	250,000	28,940	Feb. 14,	6,210	April 19
Gardner,	2—	2—	2—	2—	2—
Gloucester,	125,000	82,900	Dec. 6,	15,000	June 14
Greenfield,	50,000	22,700	Jan. 4,	5,100	July 9
Haverhill,	320,000	305,000	Jan. 22,	55,000	July 27
Holyoke,	500,000	283,564	Dec. 17,	48,390	Aug. 10
Ipswich,	2—	8,400	Dec. 21,	2,500	June 21
Jamaica Plain, . . .	200,000	167,859	Dec. 24,	58,761	July 4
Lawrence,	1,000,000	409,798	Jan. 2,	41,257	Aug. 31
Lee,	5,000	1,500	2—	400	2—
Leominster,	30,000	2—	2—	2—	2—
Lexington,	20,000	3—	3—	3—	3—
Lowell,	1,000,000	1,278,000	Dec. 17,	233,000	Aug. 3
Lynn,	700,000	367,600	Dec. 23,	67,400	July 4
Malden,	200,000	170,800	Dec. 18,	56,800	June 11
Manufacturers' (Fall River),	2—	141,800	Dec. 18,	13,100	June 2
Marblehead,	55,000	2—	2—	2—	2—
Marlborough,	100,000	30,590	Dec. 20,	3,760	Aug. 4
Middleborough, . . .	2—	8,000	Dec. 24,	2—	2—
Milford,	80,000	69,810	Dec. 30,	11,000	June 14

¹ No record kept.² Not returned.³ No station meter.

NAME OF COMPANY.	Daily Capacity of Works.	Greatest Output.	Date.	Least Output.	Date.
	Feet.	Feet.		Feet.	
Nantucket, . . .	28,000	11,580	Aug. 14,	2,890	May 17
Natick, . . .	35,000	23,900	Dec. 17,	3,500	July 6
New Bedford, . . .	300,000	214,200	Dec. 2,	64,500	July 1
Newburyport, . . .	100,000	51,780	Dec. 17,	11,970	June 8
Newton, . . .	250,000	267,000	Dec. 28,	75,000	July 14
North Adams, . . .	130,000	103,900	Dec. 6,	25,200	Aug. 4
Northampton, . . .	75,000	65,830	Dec. 6,	12,861	Aug. 3
North Attleborough,	110,000	72,388	Dec. 17,	11,192	July 13
Norwood, . . .	1 —	1 —	1 —	1 —	1 —
Pittsfield, . . .	240,000	68,000	Dec. 23,	20,000	June 19
Plymouth, . . .	20,000	24,440	Jan. 2,	5,430	June 28
Roxbury, . . .	500,000	803,106	Dec. 24,	163,671	July 8
Salem, . . .	300,000	198,000	Jan. 4,	42,000	July 17
South Boston, . . .	425,000	357,996	Dec. —	98,470	July —
Southbridge, . . .	1 —	1 —	1 —	1 —	1 —
Spencer, . . .	225,000	48,700	Dec. 31,	11,100	June 14
Springfield, . . .	500,000	432,000	Dec. 17,	72,000	July 13
Stoughton, . . .	10,000	4,000	1 —	1,000	1 —
Taunton, . . .	300,000	235,000	Dec. 25,	55,000	June 14
Waltham, . . .	200,000	154,300	Dec. 17,	22,400	Aug. 10
Ware, . . .	70,000	29,730	Dec. 18,	4,370	June 15
Webster, . . .	24,000	12,000	Dec. 23,	6,000	Aug. 3
Westfield, . . .	40,000	42,600	Dec. 18,	7,600	Aug. 4
Williamstown, . . .	3,500	2 —	2 —	2 —	2 —
Woburn, . . .	80,000	42,000	Dec. 25,	10,000	July 5
Worcester, . . .	1,050,000	698,000	Dec. 17,	118,600	July 5

¹ Not returned.² No station meter.

The following tables show the total quantity of gas sold during the year ending June 30, 1891; the percentage of increase in sales over the previous year; the capital (including bonds) per thousand feet sold, omitting those companies which have electric light plants; the average price received for all gas sold during the year ending June 30, 1891; and the average price the year previous:—

Coal-gas Companies.

[Boldface figures show decrease.]

NAME OF COMPANY.	Total Sales of Gas,	Increase over 1889-90 Per Cent.	Capital per M sold, includ- ing bonds.	Average price received per M sold, 1890-91.	Average price received per M sold, 1889-90.
	Feet.				
Adams,	5,059,000	3.35	\$3.420	\$2 41	\$2 39
Amesbury,	4,676,690	9.63	12.829	1 75	1 74
Arlington,	6,037,090	0.67	11.595	2 75	2 75
Athol,	2,467,900	8.39	—	2 35	2 37
Attleborough,	7,362,400	14.56	6.302	2 00	2 00
Bay State (Boston), ¹ .	625,484,000	349.20	8.013	1 00	1 00
Beverly,	7,158,550	12.77	—	2 31	2 31
Boston,	1,414,783,122	6.99	1.767	1 20	1 23
Brockton,	17,083,200	21.88	12.410	2 06	2 09
Brookline,	57,190,035	5.76	—	1 92	1 94
Cambridge,	126,125,876	6.30	5.550	1 57	1 64
Charlestown,	75,898,485	0.93	—	1 69	1 69
Chelsea,	30,342,078	1.51	—	1 94	1 96
Chicopee,	8,827,964	5.74	3.398	1 82	1 80
Citizens' (Quincy), . .	6,617,500	10.23	8.009	1 92	2 34
Citizens' (Wakefield), .	5,645,000	8.10	—	2 02	2 46
Clinton,	7,738,620	2.40	—	2 07	2 12
Cottage City,	2,009,900	18.35	—	2 00	1 96
Danvers,	1,968,000	18.15	11.687	2 65	2 61
Dedham,	5,586,300	6.80	19.512	1 93	2 27
Dorchester,	67,269,760	9.51	5.946	1 59	1 93
East Boston,	37,928,632	3.34	5.800	1 72	1 72
Easthampton,	4,035,900	9.76	7.681	2 50	2 52
Fall River,	42,532,509	10.38	6.771	1 51	1 56
Fitchburg,	16,385,800	4.57	—	1 91	1 90
Framingham,	1,129,600	—	—	² 0 58	—
Gloucester,	14,333,750	10.62	5.581	1 81	1 79
Greenfield,	3,582,600	20.66	14.375	2 03	2 35
Haverhill,	56,488,800	4.82	2.071	1 39	1 38
Holyoke,	48,149,984	3.44	—	1 54	1 58
Jamaica Plain,	34,059,970	1.81	7.120	1 96	1 95
Lawrence,	67,981,211	1.74	—	1 41	1 41
Lowell,	224,526,000	0.01	2.361	1 10	1 10
Lynn,	65,082,200	6.99	—	1 58	1 75
Malden,	32,683,300	6.85	6.968	1 91	1 95
Manufacturers' (Fall River),	13,282,300	0.92	3.764	1 44	1 52

¹ Sells only to other companies.

² Non-illuminating fuel gas.

NAME OF COMPANY.	Total Sales of Gas.	Increase over 1889-90 Per Cent.	Capital per M sold, includ- ing Bonds.	Average price received per M sold, 1889-91.	Average price received per M sold, 1889-91.
	Feet.				
Marblehead, . . .	3,468,400	9.57	\$13,320	\$2 50	\$2 54
Marlborough, . . .	4,522,000	5.75	11,057	2 31	2 32
Milford, . . .	9,973,900	1.33	7,249	1 86	1 96
Nantucket, . . .	1,689,800	11.34	21,304	2 55	2 66
Natick, . . .	3,658,300	14 65	7,791	1 57	2 10
New Bedford, . . .	40,178,558	6 80	—	1 59	1 48
Newburyport, . . .	8,760,500	0 30	—	2 03	2 01
Newton, . . .	50,958,300	8.64	—	1 95	1 91
North Adams, . . .	15,592,800	16 56	—	1 74	1 72
Northampton, . . .	11,138,000	7.14	4 489	1 88	1 90
North Attleborough, . . .	12,659,800	1 55	5,379	1 99	2 00
Norwood, . . .	1,105,100	20 73	10,858	2 44	2 43
Pittsfield, . . .	13,678,150	2 34	4,569	1 89	1 89
Plymouth, . . .	4,165,900	4.81	9,602	2 10	2 10
Roxbury, . . .	162,221,077	4.24	3,699	1 53	1 59
Salem, . . .	35,651,094	1.29	8,415	1 76	1 80
South Boston, . . .	70,563,099	7.11	6,916	1 55	1 72
Spencer, . . .	8,412,000	14 30	—	1 49	1 25
Springfield, . . .	78,637,800	2.42	6,994	1 69	1 66
Taunton, . . .	37,926,000	2.13	2,109	1 47	1 47
Waltham, . . .	27,565,500	3.29	—	1 89	1 84
Ware, . . .	2,179,173	1.03	—	¹ 2 24	¹ 2 31
Webster, . . .	1,595,500	12.34	—	2 28	2 29
Westfield, . . .	6,445,933	8.20	—	2 14	2 29
Woburn, . . .	7,758,150	2.01	5,813	1 78	1 78
Worcester, . . .	124,510,400	4.61	4,337	1 50	1 50
	3,892,529,260				

¹ Average from gas sold to public.*Oil-gas Companies.*

Amherst, . . .	819,207	1 90	—	\$5 36	\$5 22
Chicopee Falls, . . .	777,000	0.63	—	¹ 3 51	¹ 3 33
Gardner, . . .	901,000	6.27	\$33,296	4 54	4 50
Ipswich, . . .	1,511,200	3.93	16,533	2 99	3 01
Lee, . . .	154,000	183.91	—	5 00	5 50
Leominster, . . .	1,796,367	21.69	27,834	3 94	4 00
Lexington, . . .	1,067,790	9.87	18,730	4 45	4 47
Middleborough, . . .	700,000	² —	—	2 54	5 00
Southbridge, . . .	1,304,694	1.76	—	2 86	2 82
Stoughton, . . .	³ —	—	—	—	5 50
Williamstown, . . .	426,800	241.46	69 682	5 34	5 66
	9,458,058				

¹ Average price gas sold to the public.² Return covers six months only.³ Not returned.

The following tables show the capital (including bonds), the gas sold, the gas unaccounted for, and the number of consumers per mile of main; also the gas sold per consumer and per meter light. Where capital is employed for both gas and electric light, the amount per mile of main is omitted.

Coal-gas Companies.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unaccounted for.	Number of Consumers.		
		Feet.	Feet.		Feet.	Feet.
Adams,	\$3,460	1,011,800	284,200	26.4	38,326	3,827
Amesbury,	9,740	759,203	57,664	28.6	25,558	3,385
Arlington,	3,177	273,915	51,019	19.3	14,204	2,634
Athol,	-	766,428	61,779	42.2	18,146	2,727
Attleborough,	10,716	1,700,323	180,923	58.2	29,216	6,105
Beverly,	-	1,101,315	95,038	70.6	14,786	2,919
Boston,	18,945	10,721,303	547,456	223.1	46,527	4,453
Brockton,	12,848	1,035,345	291,200	52.0	19,910	3,230
Brookline,	-	827,163	147,248	30.3	21,926	3,192
Cambridge,	8,310	1,497,220	142,747	68.5	20,054	3,828
Charlestown,	-	1,832,411	252,764	96.7	16,407	3,384
Chelsea,	-	842,835	141,551	45.7	18,434	3,821
Chicopee,	8,000	2,354,123	500,889	56.0	41,909	3,737
Citizens' (Quincy),	4,586	572,596	181,785	33.1	14,667	2,552
Citizens' (Wakefield),	-	310,506	60,506	19.6	14,599	2,109
Clinton,	-	1,682,308	48,196	49.8	33,707	2,025
Cottage City,	-	881,535	301,315	79.4	9,861	2,324
Danvers,	5,077	434,437	111,192	29.6	14,687	1,883
Dedham,	7,933	406,572	112,685	21.9	18,497	2,636
Dorchester,	6,425	1,080,465	200	51.7	13,621	2,701
East Boston,	10,800	1,861,985	220,836	76.3	17,862	4,635
Easthampton,	8,516	1,108,763	126,373	47.8	23,195	2,056
Fall River,	12,598	1,860,564	166,329	62.9	27,673	2,277
Fitchburg,	-	1,411,352	114,720	55.6	24,250	3,392
Framingham,	32,413	243,448	168,168	21.6	-	-
Gloucester,	8,138	1,458,163	111,622	68.5	20,184	4,505
Greenfield,	10,774	749,498	102,238	46.9	15,994	3,915
Haverhill,	5,449	2,631,057	148,122	106.3	22,918	3,868
Holyoke,	-	2,547,618	207,782	81.6	30,976	3,932
Jamaica Plain,	9,011	1,265,699	118,766	52.7	16,346	2,987
Lawrence,	-	1,914,424	198,309	69.3	27,635	4,066
Lowell,	6,871	2,911,007	157,535	103.9	27,002	3,745
Lynn,	-	2,145,095	284,957	82.9	25,877	4,626
Malden,	3,898	559,358	50,171	33.1	16,882	3,203
Manufacturers' (Fall River),	10,526	2,796,273	253,305	63.2	41,805	2,203
Marblehead,	7,857	589,864	211,714	35.7	14,432	2,434
Marlborough,	14,881	1,345,833	270,279	58.9	22,687	2,761
Milford,	9,329	1,286,954	82,297	60.8	20,279	2,978
Nantucket,	7,438	349,132	100,079	28.9	9,028	2,135
Natick,	6,291	807,571	43,863	48.3	15,000	1,895
New Bedford,	-	1,371,281	118,202	85.5	13,805	2,729
Newburyport,	-	978,827	216,925	51.6	18,962	3,215
Newton,	-	766,290	85,633	35.1	19,296	3,149
North Adams,	-	1,556,167	426,896	53.3	28,516	4,052
Northampton,	5,160	1,149,432	122,174	48.9	23,498	3,219
North Attleborough,	7,362	1,368,623	134,642	40.6	33,640	4,777
Norwood,	2,778	255,810	-	10.2	25,115	1,765
Pittsford,	7,852	1,718,360	206,640	80.2	21,074	4,296
Plymouth,	11,111	1,157,194	71,906	67.5	17,144	1,965
Roxbury,	8,329	2,251,819	14,732	104.4	17,846	3,369

Coal-gas Companies — Concluded.

NAME OF COMPANY.	PER MILE OF MAIN.				Gas sold per Consumer.	Gas sold per Meter Light.
	Capital.	Gas sold.	Gas unaccounted for.	Number of Consumers.		
		Feet.	Feet.		Feet.	Feet.
Salem, . . .	\$12,190	1,448,642	262,743	103.7	13,673	2,849
South Boston, . . .	16,084	2,325,744	265,711	82.7	23,831	4,668
Spencer, . . .	—	658,731	20,501	38.6	17,063	3,902
Springfield, . . .	12,800	1,830,060	69,644	86.0	21,094	2,452
Taunton, . . .	4,018	1,904,872	100,608	65.8	27,919	3,544
Waltham, . . .	—	1,391,494	88,409	50.0	26,680	4,181
Ware, . . .	—	1,736,092	201,488	67.5	25,707	2,426
Webster, . . .	—	405,980	73,613	33.8	11,996	2,231
Westfield, . . .	—	1,198,128	124,807	60.6	19,364	3,560
Woburn, . . .	7,309	1,257,398	70,494	76.2	16,507	2,989
Worcester, . . .	11,630	2,681,679	131,036	104.1	25,089	5,126

Oil-gas Companies.

Amherst, . . .	—	187,033	—	27.9	5,882	1,388
Chicopee Falls, . . .	—	669,828	—	82.8	8,094	1,678
Gardner, . . .	\$2,817	84,601	—	11.8	7,151	1,820
Ipswich, . . .	8,797	532,112	—	33.5	15,493	1,312
Lee, . . .	—	89,017	—	41.6	2,139	507
Leominster, . . .	6,821	245,070	16,526	29.3	8,355	1,665
Lexington, . . .	6,849	365,681	—	38.4	6,570	1,530
Middleborough, . . .	—	—	—	47.0	—	—
Southbridge, . . .	—	609,670	18,575	93.5	6,523	1,173
Stoughton, . . .	8,000	125,788	—	19.0	6,620	2,639
Williamstown, . . .	—	—	—	—	11,535	2,884

The following table shows the number of tons of coal carbonized in 1889-90 and 1890-91, the kind and quantities of enricher used by the various coal-gas companies, and the percentage of cost of coal received from residuals:—

NAME OF COMPANY.	Number of Tons of Coal carbon- ized, Year ending June 30, 1891.	Number of Tons of Coal carbon- ized, Year ending June 30, 1890.	ENRICHERS USED.	Cannel. Tons.	Naphtha. Gallons.	Residuum. Barrels.	Oil. Gallons.	Percentage of cost of Coal received from Resid- ual Products.
Adams,	605	678	Cannel,	125	—	—	—	35.51
Arlington,	726	661	Oil,	—	—	—	1,021	18.88
Althol,	276	278	—	—	—	—	—	—
Attleborough,	879	815	Lima oil,	—	—	—	500	30.13
Beverly,	806	698	Residuum,	—	—	57	—	30.72
Boston,	67,873	116,595	Cannel, naphtha,	111	1,067,028	—	—	36.09
Brookline,	1,998	1,600	Residuum,	—	—	50	—	41.74
Brookline,	5,986	5,645	Cannel,	349	—	—	64,425	32.30
Cambridge,	11,709	10,909	Oil,	—	—	—	—	46.80
Charlestown,	7,201	7,501	Naphtha,	—	—	—	—	60.84
Chelsea,	3,833	3,634	Gas oil,	—	—	—	8,624	41.24
Chicopee,	897	1,024	Lima oil,	—	—	—	5,000	14.43
Citizens' (Quincy),	862	661	Naphtha,	—	500	—	—	36.46
Citizens' (Wakefield),	940	630	—	—	—	—	—	72.14
Clinton,	922	910	Oil,	—	—	—	4,637	31.68
Danvers,	258	217	Residuum,	—	—	9	—	21.42
Dorham,	725	745	Cannel, residuum,	23	—	60	—	25.82
Dorchester ² ,	—	196	—	—	—	—	—	—
East Boston,	4,243	3,850	Lima oil,	—	—	—	10,014	40.94
East Hampton,	388	421	Cannel, naphtha,	—	2,700	—	—	16.74
Fitchburg,	1,565	1,460	Cannel, gas oil,	46	—	—	2,357	42.62
Gloucester,	1,379	1,232	Gas oil,	32	—	—	6,895	46.07
Greenfield,	368	322	Residuum,	—	—	35	—	16.72
Haverhill,	5,663	5,520	Cannel,	192	—	—	—	62.10
Holyoke,	4,547	4,463	Cannel, crude oil,	5	—	—	26,464	39.32
Jamaica Plain,	3,498	3,559	Cannel,	150	—	—	—	36.22
Lawrence,	5,418	5,892	Cannel, crude oil,	18	—	—	47,556	53.47
Lowell,	20,883	20,904	Naphtha, crude oil,	—	—	—	55,182	57.01
Lynn,	5,839	5,916	Lima oil,	—	36,009	—	46,247	31.70

The following tables show the materials and quantity of each used in the manufacture of water and oil gas, also the process used, and the quantity of water gas made:—

Water Gas.

NAME OF COMPANY.	Process used.	Materials used in Generator.	Quantity used. Tons.	Enricher used.	Quantity used. Gallons.	Gas made. Feet.
Amesbury, .	Lowe-Granger,	Anthracite, .	¹ 210	Naphtha, .	7,940	5,064,900
Bay State, Boston, .	Flannery,	Anthracite, .	² 14,527	Petroleum, .	16,441	
Charlestown, .	Granger, .	Coke, . . .	³ -	Petroleum, .	113,375	625,929,000
Cottage City, .	Loomis, .	Anthracite, .	⁴ 192	Naphtha, .	2,788,639	
Fall River, .	Lowe, .	Anthracite, .	⁵ 829	Naphtha, .	60,531	11,244,000
Framingham, .	Loomis, .	Cumberland coal, . .	⁶ 67	Petroleum, .	207,986	2,696,000
Lawrence, .	Lowe, .	Anthracite, .	⁷ 318	-	-	43,492,500
Lynn, . . .	Granger	Coal, . . .	⁷ 172	Petroleum, .	58,662	2,237,900
	and Lowe, .	Coke, . . .	⁸ -	Lima oil, .	47,093	13,490,405
Pittsfield, .	Lowe, .	Anthracite, .	⁹ 110	Naphtha, .	40,165	10,025,500
Spencer, .	Evans, .	Coke, . . .	¹⁰ -	Petroleum, .	47,559	6,917,000
Worcester, .	Granger, .	Coke, . . .	¹¹ -	Petroleum, .	46,706	9,021,900
				Naphtha, .	249,170	46,886,000

¹ 28 tons of screenings, cinders and anthracite used for generating steam.

² 747 tons coke and screenings from generator used for steam.

³ 306 chaldrons coke used in generator; steam obtained from electric-light boilers.

⁴ Steam taken from electric-light boilers. Non-illuminating gas made.

⁵ For generating steam, 314 tons pea coal, 19 tons buckwheat coal, 3 tons coke, 51 tons screenings, 22 tons slack.

⁶ 24 tons Cumberland used for generating steam. Non-illuminating gas made. In operation from Jan. 13, 1891.

⁷ Steam taken from electric-light boilers.

⁸ 4,837 bushels of coke used in generator. Coke used for steam; quantity not given.

⁹ Coal and coke breeze used in generating steam. Quantity not given.

¹⁰ Made in works and not measured. 90 tons of coal used for generating steam.

¹¹ 46,763 bushels coke used in generator, and one-sixth of a bushel per M used for steam.

Oil Gas.

NAME OF COMPANY.	Materials used.	Quantity used. Gallons.	Fuel used.	Quantity used.
Amherst,	Naphtha, .	12,302	Coke,	2,821 bushels.
Chicopee Falls,	Petroleum, .	31,131	Anthracite, .	86 tons.
Gardner,	Naphtha, .	21,015	Wood,	120 cords.
Ipswich,	Petroleum, .	24,673	Cumberland coal, .	88 tons.
Lee,	Petroleum, .	¹ -	Bituminous coal, .	1 -
Leominster,	Gas oil, . .	18,956	Cumberland coal, .	114 tons.
Lexington,	Petroleum, .	11,168	Anthracite, .	78 tons.
Middleborough, ²	Naphtha, .	6,008	{ Steam coal, . .	{ 25 tons.
			{ Wood,	{ 15 cords.
Southbridge,	Petroleum, .	12,603	{ Anthracite, . .	{ 51½ tons.
Stoughton,	Naphtha, .	¹ -	{ Wood,	{ 2½ cords.
Williamstown,	Naphtha, .	6,750	Bituminous coal, .	1 -
	Petroleum, .	258	{ Wood,	{ 38½ cords.

¹ Not given.

² For six months only.

STREET MAINS.

The returns by the various companies of their street mains are still somewhat deficient in detail. During the year fifty-one companies laid about forty-nine miles of mains, varying in the several cases from less than one hundred feet to nearly eight miles.

The following table shows the lengths and sizes of the mains, as returned by the companies : —

DIAMETER IN INCHES.										Total Length in Feet.	LENGTH IN MILES AND FEET.		Increase during Year.			
											Miles.	Feet.				
1	1 1/4	1 1/2	2	2 1/2	3	4	6	8	10					12	14	16	20	24
Adams,	-	-	5,280	-	10,560	2,640	7,920	-	-	-	-	-	-	26,400	5	-
Amesbury,	-	-	4,500	-	13,450	10,500	3,000	200	100	-	-	-	-	32,550	6	870
Amherst,	223	185	2,409	10,652	-	9,031	-	-	-	-	-	-	-	23,150	4	2,030
Arlington,	-	-	500	-	99,674	2,000	13,985	-	-	-	-	-	-	110,378	22	218
Attol,	2,300	800	600	1,200	-	6,200	1,000	5,000	-	-	-	-	-	17,100	3	1,200
Attituborough,	-	-	2,480	-	3,928	10,278	5,654	455	-	-	-	-	-	22,805	4	1,775
Bay State (Boston),	-	-	-	-	-	13,373	26,549	-	6,553	7,550	-	-	2,651	10,297	15	3,070
Beverly,	-	-	10,905	-	15,040	6,950	550	-	-	-	-	-	-	34,345	6	2,663
Boston,	-	-	3,008	-	153,786	116,481	250,220	22,423	23,473	69,088	-	-	487	4,553	131	5,071
Brookton,	1,150	2,327	649	2,106	-	44,059	18,321	14,852	2,400	100	-	-	-	86,964	16	2,044
Brookline,	7,171	12	36	5,561	-	123,171	108,882	46,990	20,545	9,406	4,464	924	4,142	354,089	69	709
Cambridge,	-	-	5,260	-	-	-	-	-	-	-	-	-	-	218,717	84	1,275
Charlestown,	-	4,913	250	12,083	-	132,792	34,313	17,123	5,778	5,038	5,531	301	-	100,080	36	2,237
Chelsea,	-	-	200	5,280	-	68,440	46,520	26,200	42,440	1,000	-	-	-	19,800	3	3,900
Chicopee,	-	-	2,640	2,640	-	7,920	2,640	5,900	-	-	-	-	-	6,150	1	870
Chicopee Falls,	-	1,600	550	-	2,500	1,500	-	-	-	-	-	-	-	61,095	11	2,945
Citizens' (Quincy),	-	3,725	-	11,125	-	23,175	15,000	5,075	-	-	-	-	-	96,000	18	960
Citizens' (Wakfield),	-	-	22,000	-	35,000	12,000	25,000	2,000	-	-	-	1,000	-	24,275	4	3,155
Clinton,	-	-	850	-	8,375	6,450	5,500	-	1,250	-	-	-	-	12,093	2	1,533
Cottage City,	-	-	-	-	2,532	6,584	2,002	975	-	-	-	-	-	24,036	4	2,816
Danvers,	695	136	553	5,964	-	11,007	4,364	637	-	-	-	-	-	72,572	13	3,032
Dedham,	-	-	3,000	7,192	-	30,930	12,169	18,681	-	-	-	-	-	328,756	62	1,376
Dorchester,	-	2,430	4,539	2,100	-	141,337	107,417	50,554	7,800	12,484	4,900	-	-	107,548	20	1,948
East Boston,	-	-	-	2,400	-	50,170	39,328	4,400	5,400	950	-	-	-	19,250	3	3,410
East Boston,	600	-	-	8,490	-	2,500	7,100	300	-	-	-	-	-	19,250	3	3,410
Frammingham,	-	664	812	-	-	31,809	5,852	45,566	22,310	1,500	-	2,200	-	110,713	22	4,563
Fitchburg,	-	-	149	4,000	217	41,100	5,600	5,400	5,000	2,000	-	-	-	61,300	11	3,220
Gardner,	-	-	-	230	-	12,521	6,948	8,380	2,548	1,920	-	-	-	24,531	4	3,371
Greenfield,	700	-	-	24,711	-	13,698	8,750	8,380	-	-	-	-	-	56,299	10	4,330
Greenfield,	-	-	950	1,000	-	21,041	14,216	11,200	3,080	420	-	-	-	51,907	9	4,387
Haverhill,	-	-	400	5,950	-	13,421	2,640	2,640	200	-	-	-	-	25,251	4	4,131
Holyoke,	-	-	7,365	-	62,293	4,800	26,090	-	-	-	-	-	2,923	113,387	21	2,507
Ipswich,	-	1,256	517	5,295	1,815	51,763	10,553	16,210	5,150	7,590	1,534	-	2,923	99,835	18	4,705
Jamaica Plain,	1,600	-	300	10,650	500	500	930	1,000	-	-	6,575	-	375	15,000	2	4,440
Jamaica Plain,	-	-	975	7,125	-	77,233	31,411	14,187	10,575	591	-	-	-	142,097	26	4,817

Lawrence,	15,000	—	—	—	—	—	—	—	—	157,702	35	2,792	16,822
Lee,	—	750	3,000	—	—	—	—	—	—	9,150	1	3,850	—
Lewinester,	1,200	2,640	6,000	—	—	—	—	—	—	38,720	7	1,500	—
Lexington,	1,200	2,640	6,000	—	—	—	—	—	—	15,434	2	4,824	370
Lowell,	2,321	5,415	13,339	—	—	—	—	—	—	940,262	77	7,702	19,400
Lynn,	621	1,730	4,525	—	—	—	—	—	—	160,219	20	1,819	8,048
Malden,	2,623	3,882	142	—	—	—	—	—	—	308,609	58	2,299	9,484
Manufacturers' (Fall River),	1,488	170	7,115	—	—	—	—	—	—	925,800	4	4,080	—
Marblehead,	—	—	6,578	—	—	—	—	—	—	31,082	3	4,082	9,471
Martineau,	—	1,424	1,362	—	—	—	—	—	—	17,746	3	1,906	2,488
Middleborough,	—	50	270	—	—	—	—	—	—	12,560	2	1,940	—
Milford,	1,200	—	3,700	—	—	—	—	—	—	40,980	2	4,000	800
Milford,	—	1,220	6,280	—	—	—	—	—	—	25,580	4	4,000	—
Nantucket,	—	472	15,003	—	—	—	—	—	—	23,941	4	2,821	1,009
Natick,	204	—	4,203	—	—	—	—	—	—	154,716	29	1,406	1,013
New Bedford,	1,000	—	5,280	—	—	—	—	—	—	47,256	8	3,016	328
Newburyport,	—	795	—	—	—	—	—	—	—	351,139	66	2,600	26,500
Newton,	—	17,000	125,745	—	—	—	—	—	—	52,940	10	140	900
North Adams,	—	13,860	15,840	—	—	—	—	—	—	51,158	9	3,638	2,213
Northampton,	2,440	432	5,375	—	—	—	—	—	—	48,857	9	1,357	1,127
North Attleborough,	52	211	8,074	—	—	—	—	—	—	22,820	4	1,700	370
Norwood,	—	510	—	—	—	—	—	—	—	42,050	7	5,000	—
Pittsfield,	2,000	—	2,035	—	—	—	—	—	—	18,988	3	3,148	—
Plymouth,	—	—	9,000	—	—	—	—	—	—	380,417	72	2,517	6,400
Roxbury,	—	813	29,700	—	—	—	—	—	—	139,973	24	3,263	2,372
Salem,	—	537	287	—	—	—	—	—	—	160,219	30	1,819	2,804
South Boston,	—	—	25,113	—	—	—	—	—	—	11,390	2	759	907
Southbridge,	459	27	677	—	—	—	—	—	—	67,470	12	4,110	1,405
Spencer,	15,210	2,583	3,304	—	—	—	—	—	—	220,890	42	5,120	12,706
Springfield,	—	87	2,615	—	—	—	—	—	—	15,840	3	—	—
Stoughton,	—	—	10,500	—	—	—	—	—	—	105,158	19	4,838	3,011
Taunton,	—	472	—	—	—	—	—	—	—	104,428	19	4,681	14,774
Waltham,	57	610	644	—	—	—	—	—	—	12,211	2	1,661	394
Ware,	3,158	125	2,570	—	—	—	—	—	—	20,770	3	4,909	—
West,	200	1,230	—	—	—	—	—	—	—	28,453	3	2,063	511
Westfield,	—	—	10,876	—	—	—	—	—	—	—	—	—	—
Williamstown,	—	—	6,274	—	—	—	—	—	—	32,615	4	955	—
Woburn,	500	—	15,731	—	—	—	—	—	—	245,306	46	2,426	13,664
Worcester,	9,482	3,736	6,198	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	1,415	3,619	—

¹ Includes 15,297 feet, thirty-inch main.

² Includes 26,074 feet, eighteen-inch, and 27,349 feet, thirty-inch main.

³ Includes 756 feet, nine-inch main.

⁴ Includes 5,226 feet, eighteen-inch main.

⁵ Details not returned.

HIGH-POWER GAS LAMPS.

The following table shows the number of Lungren or other high-power gas lamps in use June 30, 1891 : —

Adams,	67	Marblehead,	1
Athol,	6	Marlborough,	110
Attleborough,	11	Middleborough,	1
Beverly,	14	Milford,	130
Brockton,	109	Natick,	6
Cambridge,	about 110	New Bedford,	13
Chelsea,	15	Newburyport,	4
Chicopee,	2	Newton,	112
Clinton,	13	North Adams,	130
Dedham,	9	Northampton,	22
Dorchester,	6	North Attleborough,	50
East Boston,	about 161	Pittsfield,	16
Fall River,	32	Plymouth,	84
Fitchburg,	7	Salem,	6
Gloucester (Albo-carbon),	150	Spencer,	4
Greenfield,	21	Springfield,	14
Haverhill,	145	Taunton,	53
Holyoke,	4	Waltham,	20
Jamaica Plain,	4	Ware,	5
Lawrence,	216	Westfield,	about 20
Leominster,	1	Woburn,	2
Lowell,	18	Worcester,	14
Malden,	150		

The companies reporting more than fifty gas-stoves in use on June 30, 1891, are as follows : —

Chelsea,	about 50	New Bedford,	510
Citizens' (Quincy),	75	Newton,	131
Dedham,	61	North Adams,	about 75
East Boston,	about 70	Northampton,	about 120
Fall River,	286	Plymouth,	96
Fitchburg,	84	Salem,	about 150
Framingham,	104	Spencer,	382
Gloucester,	140	Springfield,	2,043
Greenfield,	55	Taunton,	138
Holyoke,	about 325	Waltham,	195
Lawrence,	428	Westfield,	about 80
Lowell,	about 1,700	Woburn,	about 50
Lynn,	about 100	Worcester,	1,160
Natick,	58		

PUBLIC LAMPS.

The number of public gas lamps supplied by the companies shows a decrease of 1,384 for this year.

The oil-gas companies show a loss of 2 for the year.

The following table shows the number of lamps supplied June 30, 1891, the net increase or decrease during the year, the average price per thousand feet received from gas used in street lamps, and also the cost per thousand feet of the care of the lamps when this is done by the companies :—

PUBLIC LAMPS — *Coal-gas.*

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average Price received per M, including Expenses.	Expense of Lighting and Care of Lamps Per M.
		Increase.	Decrease.		
Amesbury,	14	—	—	\$1 94	\$0 36
Beverly,	51	—	—	2 20	—
Boston,	2,662	—	322	1 00	—
Brookline,	757	35	—	2 02	24
Cambridge,	651	—	58	1 35	—
Charlestown,	638	—	94	1 55	—
Chicopee,	4	—	—	2 00	—
Citizens' (Quincy),	69	—	—	1 38	30
Citizens' (Wakefield),	63	—	13	2 16	—
Clinton,	—	—	6	2 25	—
Cottage City,	29	9	—	2 22	—
Dorchester,	1,464	—	18	1 58	—
East Boston,	618	—	77	1 60	—
Fall River,	260	—	45	1 49	—
Fitchburg,	56	—	6	1 55	—
Gloucester,	100	—	—	1 52	—
Haverhill,	191	—	10	1 25	—
Holyoke,	49	—	27	1 30	—
Jamaica Plain,	638	—	137	1 85	—
Lowell,	968	16	—	1 10	—
Malden,	—	—	2	—	—
Manufacturers' (Fall River),	70	—	14	1 40	—
Marblehead,	80	1	—	2 40	—
Marlborough,	4	—	4	2 76	—
Milford,	42	1	—	2 00	55
Nantucket,	76	—	—	2 35	46
Natick,	37	4	—	1 13	09
New Bedford,	415	—	32	1 73	46
Newton,	816	29	—	1 63	67
North Adams,	18	—	91	1 50	75
North Attleborough,	6	6	—	2 00	—
Pittsfield,	—	—	30	1 50	34
Roxbury,	1,663	—	201	1 49	—
Salem,	77	—	10	1 60	—
South Boston,	591	—	138	1 50	—
Springfield,	56	2	—	1 50	—
Taunton,	129	6	—	1 50	—
Waltham,	166	—	9	3 07	1 50
Ware,	1	1	—	2 29	—
Worcester,	397	—	110	1 50	—
	13,926				

Oil-gas.

NAME OF COMPANY.	Number of Lamps supplied.	INCREASE OR DECREASE DURING THE YEAR.		Average Price received per M, including Expenses.	Expense of Lighting and Care of Lamps, Per M.
		Increase.	Decrease.		
Amherst,	45	—	—	\$1 55	—
Chicopee Falls,	18	—	—	—	—
Ipswich,	12	—	—	3 50	—
Lexington,	87	—	—	2 68	—
Middleborough,	18	—	2	—	—
Southbridge,	1	—	—	3 00	—
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PURITY OF GAS.

The law provides that when the gas of any company is found on three consecutive inspections to give less light than fifteen standard English candles, or to contain more than twenty grains of sulphur or ten grains of ammonia per hundred cubic feet of gas, or more than ten per cent. of carbonic oxide or any sulphuretted hydrogen, a fine of one hundred dollars shall be paid by such company to the city or town supplied by it. (Pub. Stats., chap. 61, sect. 14.)

By chapter 252 of the Acts of 1890, the provision of the Public Statutes relating to carbonic oxide was stricken out, so that it is no longer illegal to manufacture gas containing more than ten per cent. of this substance.

The following table shows the amount of impurities found on the given dates, and the whole number of inspections during the year, of the gas of the several companies therein named, as reported to this Board by the State Inspector of Gas:—

Kind of Impurities.	NAME OF COMPANY.	Amount of Impurity.	Date when found.	Total Number of Inspections during the Year
Deficient candle power.	Charlestown,	14.0	Aug. 7.	15
Sulphur, grains per 100 cu. ft.	New Bedford,	22.5	May 22.	9
Ammonia, grains per 100 cu. ft.	Brockton,	15.9	Dec. 8,	4
	Chelsea,	17.3	June 2,	7
	Chelsea,	52.6	Nov. 27,	—
	East Boston,	12.8	June 2,	8
	East Boston,	21.3	July 3,	—
	Haverhill,	17.2	July 21,	11
	Holyoke,	23.6	July 22,	10
	Holyoke,	15.9	Nov. 19,	—
	Lowell,	10.4	Jan. 23,	39
	Nantucket,	16.4	Aug. 27,	2
	North Adams,	12.5	Dec. 23,	5
	Northampton,	16.6	Jan. 29,	4
	Northampton,	21.3	Dec. 16,	—
	Plymouth,	16.7	Mar. 13,	2
	Quincy,	11.8	Mar. 12,	3
	Quincy,	11.6	Sept. 30,	—
	South Boston,	18.9	June 20,	13
	Taunton,	12.0	Mar. 4,	8
	Taunton,	43.5	April 9,	—
Sulphuretted Hydrogen.	Taunton,	21.7	May 22,	—
	Wakefield,	54.9	Feb. 26,	3
	Waltham,	12.2	Aug. 19,	6
	Waltham,	10.5	Dec. 23,	—
	Worcester,	13.0	July 22,	22
	North Adams,	Trace.	Jan. 28,	5
	North Adams,	"	Dec. 23,	—
	Plymouth,	"	Mar. 13,	2
	Plymouth,	"	Dec. 4,	—
	Salem,	"	April 4,	8
	Salem,	"	May 7,	—
	Salem,	"	Sept. 11,	—
	Salem,	"	Oct. 15,	—
	Spencer,	"	Nov. 3,	3
	Spencer,	"	Dec. 10,	—
	Wakefield,	"	Feb. 26,	3
	Wakefield,	"	Dec. 30,	—

Of the inspections for ammonia cited above, the two at East Boston, the two at Quincy, and the three at Taunton were consecu-

tive; as was also the case with the two for sulphuretted hydrogen at Plymouth and Spencer. At Salem, two were consecutive; and then after two inspections, where no sulphuretted hydrogen was found, the next two were consecutive.

A comparison of the inspections made during the five years from 1887 to 1891, inclusive, shows the following results:—

	1887.	1888.	1889.	1890.	1891.
Number of inspections made,	445	458	451	443	483
Number of companies subject to inspection,	59	60	59	59	58
Number of companies showing deficiency in candle-power,	1	1	4	2	1
Highest candle-power, not including ten oil-gas companies,	23.3	21.6	22.1	25.4	27.3
Lowest candle-power, not including ten oil-gas companies,	12.5	13.3	14.2	13.8	14.0
Average candle-power, not including ten oil-gas companies,	17.74	17.60	17.59	17.79	18.13
Number of companies showing sulphuretted hydrogen,	4	1	4	9	5
Number of companies showing excess of sulphur,	4	1	1	1	1
Number of companies showing excess of ammonia,	9	13	9	15	16
Largest amount of sulphur,	25.2	23.1	22.9	24.1	22.5
Smallest amount of sulphur,	1.4	3.2	1.5	1.4	0.9
Average amount of sulphur,	8.81	9.26	7.32	10.08	9.53
Largest amount of ammonia,	43.4	76.0	32.3	37.0	54.9
Smallest amount of ammonia,	1.—	1.—	1.—	1.—	1.—
Average amount of ammonia,	3.29	3.07	2.82	3.01	3.42

The inspections of the ten oil-gas companies showed:—

	1887.	1888.	1889.	1890.	1891.
Highest candle-power,	59.7	52.4	55.0	70.5	53.6
Lowest candle-power,	22.1	21.5	20.8	21.1	20.2
Average candle-power,	30.36	33.73	34.72	39.04	33.62

ELECTRIC LIGHT.

The following table gives the names of those companies in active operation on June 30 last, together with the localities supplied and the amount of capital stock :—

NAME OF COMPANY.	LOCALITIES SUPPLIED.	CAPITAL.
Adams Electric Light and Power Co.,	Adams,	\$8,500
Amherst Gas Co.,	Amherst,	—
Andover Electric Co.,	Andover,	39,000
Athol Gas and Electric Co.,	Athol,	—
Beverly Gas Light Co.,	Beverly,	—
Blue Hill Electric Co.,	Canton,	20,000
Boston Electric Light Co.,	Boston,	1,076,000
Bridgewater Electric Co.,	Bridgewater,	15,000
Brookline Gas Light Co.,	Brookline, Boston (Brighton),	—
Cambridge Electric Light Co.,	Cambridge,	200,000
Charlestown Gas Co.,	Charlestown,	—
Chelsea Gas Light Co.,	Chelsea,	—
Chicopee Electric Co.,	Chicopee,	10,000
Citizens' Gas Light Co.,	Wakefield, Reading,	—
Clinton Gas Light Co.,	Clinton,	—
Cohasset Electric Co.,	Cohasset, Scituate,	30,000
Cottage City Gas and Electric Light Co.,	Cottage City,	—
Dedham Electric Co.,	Dedham,	60,000
Easthampton Gas Co.,	Easthampton,	—
Edison Electric Illuminating Co. of Boston,	Boston,	1,263,500
Edison Electric Illuminating Co. of Brockton,	Brockton,	92,500
Edison Electric Illuminating Co. of Fall River,	Fall River,	90,000
Edison Electric Illuminating Co. of Lawrence,	Lawrence,	65,000
Electric Light and Patent Flooring Co.,	Amesbury,	42,400
Fall River Electric Light Co.,	Fall River,	120,000
Fitchburg Gas Co.,	Fitchburg,	—
Framingham Electric Co.,	Framingham, Ashland,	80,000
Franklin Electric Light Co.,	Turner's Falls,	10,000
Gardner Electric Light Co.,	Gardner,	30,000
Gloucester Electric Co.,	Gloucester,	38,700
Great Barrington Electric Light Co.,	Great Barrington,	23,800
Greenfield Electric Light and Power Co.,	Greenfield, Deerfield,	30,000
Haverhill Electric Co.,	Haverhill,	85,000
Holyoke Water Power Co.,	Holyoke,	—
Hudson Electric Light Co.,	Hudson,	9,125
Hyde Park Electric Light Co.,	Hyde Park,	100,000
Lawrence Gas Co.,	Lawrence, No. Andover, Methuen,	—
Lee Electric Co.,	Lec,	—
Leicester Electric Co.,	Leicester,	4,000
Leominster Electric Light and Power Co.,	Leominster,	50,000
Lowell Electric Light Corporation,	Lowell, Dracut, Tyngsboro',	274,000
Lynn Gas and Electric Co.,	Lynn, Swampscott,	—
Malden Electric Co.,	Malden, Melrose, Medford, Everett,	145,100
Marlborough Electric Co.,	Marlborough,	30,000
Middleborough Gas and Electric Co.,	Middleborough,	—
Milford Electric Light and Power Co.,	Milford, Hopedale,	40,000
Millbury Electric Co.,	Millbury,	15,000
Milton Light and Power Co.,	Milton,	50,000
Nantucket Electric Light Co.,	Nantucket,	25,000
Natick Electric Co.,	Natick, Wayland,	40,000
New Bedford Gas and Edison Light Co.,	New Bedford, Fairhaven,	—
Newburyport Gas and Electric Co.,	Newburyport,	—

NAME OF COMPANY.	LOCALITIES SUPPLIED.	CAPITAL.
Newton and Watertown Gas Light Co., . .	Newton, Watertown, . .	-
North Adams Gas Light Co.,	North Adams,	-
Northampton Electric Lighting Co., . .	Northampton,	\$58,700
North Attleborough Steam and Electric Co.,	Attleborough, North Attle-	
	borough, Wrentham, . .	80,000
North Shore Electric Co.,	Revere, Winthrop, . .	125,000
Orange Electric Light Co.,	Orange,	25,000
Palmer Electric Co.,	Palmer, Monson,	30,000
Pittsfield Electric Co.,	Pittsfield,	100,000
Plymouth Electric Light Co.,	Plymouth,	40,000
Quincy Electric Light and Power Co., . .	Quincy,	67,500
Salem Electric Lighting Co.,	Salem, Peabody,	110,000
Somerville Electric Light Co.,	Somerville, Arlington, Bel-	
	mont,	161,400
Southbridge Gas and Electric Co., . . .	Southbridge,	-
South Hadley Falls Electric Light Co., .	South Hadley,	7,000
Spencer Gas Co.,	Spencer,	-
Stoughton Gas and Electric Co.,	Stoughton,	-
Suburban Light and Power Co.,	Boston,	83,000
Taunton Electric Lighting Co.,	Taunton,	40,000
Union Electric Light Co.,	Franklin,	20,000
United Electric Light Co.,	Springfield,	372,700
Uxbridge and Northbridge Electric Co., .	Uxbridge, Northbridge, .	31,200
Waltham Gas Light Co.,	Waltham,	-
Walworth Light and Power Co.,	Boston,	15,000
Ware Electric Co.,	Ware,	20,000
Webster Electric Co.,	Webster, Dudley,	-
Westborough Electric Light and Power Co.,	Westborough,	25,000
Westfield Gas Light Co.,	Westfield,	-
Weymouth Light and Power Co.,	East Weymouth, Wey-	
	mouth, Hingham,	50,000
Whitman Electric Co.,	Whitman,	20,000
Winchendon Electric Light and Power Co.,	Winchendon,	12,000
Woburn Electric Light Co.,	Woburn, Winchester, . .	
	Stoneham,	120,000
Worcester Electric Light Co.,	Worcester,	200,000

In the case of the several gas companies doing electric lighting, the capital will be found in the table of gas companies.

The following companies have bonds and notes outstanding:—

Adams,	\$9,875 00
Blue Hill (Canton),	16,000 00
Boston,	388,078 62
Bridgewater,	12,000 00
Cambridge,	155,878 50
Chicopee,	2,300 00
Cohasset,	500 00
Dedham,	31,448 02
Edison (Boston),	713,000 00
Edison (Brockton),	111,511 07
Edison (Fall River),	23,000 00
Edison (Lawrence),	42,500 00
E. L. & Patent Flooring Co., (Amesbury), . .	62,600 00

Fall River,	\$2,000 00
Framingham,	54,466 39
Franklin (Turner's Falls),	400 00
Gardner,	43,900 00
Gloucester,	4,674 44
Great Barrington,	4,500 00
Greenfield,	10,000 00
Haverhill,	35,500 00
Hudson,	7,000 00
Hyde Park,	54,277 96
Leicester,	21,209 45
Leominster,	38,775 04
Lowell,	140,090 23
Malden,	136,099 17
Marlborough,	27,500 00
Middleborough,	80,000 00
Milford,	14,500 00
Millbury,	16,000 00
Natick,	84,837 00
North Adams,	45,800 00
Northampton,	22,951 82
North Attleborough,	39,353 36
North Shore (Revere),	100,269 02
Orange,	15,000 00
Palmer,	20,300 00
Pittsfield,	29,502 39
Plymouth,	30,000 00
Quincy,	33,364 79
Salem,	40,500 00
Somerville,	55,000 00
Suburban (Boston),	12,792 52
Taunton,	12,500 00
Union (Franklin),	30,000 00
United (Springfield),	103,000 00
Uxbridge and Northbridge,	19,000 00
Walworth (Boston),	10,125 00
Ware,	15,500 00
Westborough,	18,800 00
Weymouth,	75,000 00
Woburn,	156,387 69
Worcester,	75,000 00

In these amounts, the borrowed money which the gas companies have invested in electric lighting is not included, it being already given in the table relating to gas companies.

The following table shows the whole number of stockholders, the number resident in Massachusetts, and the value at par of the stock held in the State on June 30, 1891:—

NAME OF COMPANY.	Whole Number of Stockholders.	Number resident in Massachusetts.	Value of Stock held in Massachusetts.
Adams,	7	7	\$8,500
Andover,	—	—	—
Blue Hill (Canton),	—	—	20,000
Boston,	406	137	415,300
Bridgewater,	14	14	15,000
Cambridge,	33	33	200,000
Chicopee,	6	6	10,000
Cohasset,	26	26	30,000
Dedham,	29	29	60,000
Edison (Boston),	78	69	731,600
Edison (Brockton),	25	23	67,000
Edison (Fall River),	48	42	60,200
Edison (Lawrence),	7	7	65,000
E. L. & Patent Flooring Company (Amesbury),	25	21	38,400
Fall River,	53	44	102,300
Framingham,	8	8	80,000
Franklin (Turner's Falls),	29	29	10,000
Gardner,	35	34	28,400
Gloucester,	8	8	38,700
Great Barrington,	21	9	6,800
Greenfield,	41	32	23,400
Haverhill,	42	42	85,000
Hudson,	13	13	9,125
Hyde Park,	12	12	100,000
Leicester,	13	13	4,000
Leominster,	9	9	50,000
Lowell,	358	324	223,100
Malden,	39	36	133,900
Marlborough,	10	9	29,000
Middleborough,	13	13	80,000
Milford,	21	21	40,000
Millbury,	26	26	15,000
Nantucket,	—	—	—
Natick,	7	7	40,000
Northampton,	68	68	58,700
North Attleborough,	19	19	80,000
North Shore (Revere),	12	12	125,000
Orange,	4	4	25,000
Palmer,	13	12	29,900
Pittsfield,	37	36	92,500
Plymouth,	8	8	40,000
Quincy,	85	85	67,500
Salem,	106	103	134,800
Somerville,	208	202	159,100
South Hadley Falls,	3	3	7,000
Suburban,	5	5	83,000
Taunton,	17	17	40,000
Union (Franklin),	4	4	20,000
United (Springfield),	101	93	329,700

NAME OF COMPANY.	Whole Num- ber of Stock- holders.	Number resi- dent in Mas- sachusetts.	Value of Stock held in Massachusetts.
Uxbridge and Northbridge,	48	47	\$33,800
Walworth (Boston),	8	8	15,000
Ware,	20	20	20,000
Westborough,	19	18	24,990
Weymouth,	10	10	50,000
Whitman,	9	9	20,000
Winchendon,	27	26	4,300
Woburn,	57	56	119,700
Worcester,	81	79	199,500

The following show the aggregate results of the operation of the electric light central stations in the State for the year ending June 30, 1890, and for the year ending June 30, 1891:—

	YEAR ENDING JUNE 30.	
	1890.	1891.
RECEIPTS.		
For light and power,	\$1,908,394 00	\$2,432,869 15
From other sources,	12,308 05	7,481 50
	\$1,920,702 05	\$2,440,350 65
EXPENSES.		
For manufacture,	\$752,831 18	\$1,014,242 88
distribution,	281,046 33	356,332 38
office expenses and management, .	116,350 92	159,230 90
taxes,	67,620 91	82,743 77
miscellaneous,	122,965 26	122,656 20
	\$1,340,814 60	\$1,735,206 13
Leaving a balance of	\$579,887 45	\$705,144 52
Of this profit, the gas companies made in their electrical departments, . .	110,871 40	143,240 78
Leaving for the electric light companies, To which should be added the income from rents, jobbing, etc., amount- ing to,	\$469,016 05	\$561,903 74
	-	45,022 10
Making a total of	-	\$606,925 84
Against which the following charges were made:—	-	
Interest,	-	\$144,678 87
Dividends,	-	262,968 00
Depreciation,	-	41,225 21
Sundry items,	-	7,671 57
		\$456,543 65
Leaving a surplus to be carried for- ward of	-	\$150,382 19

Aggregates from the balance sheets of the electric companies only, for the year ending June 30, 1891, show the following figures:—

ASSETS:—

Construction accounts, including patent rights and franchises,	\$9,031,520 47
Cash on hand,	262,284 10
Due for light and power,	178,034 22
Other accounts due,	67,475 82
Materials, etc.,	240,933 02
Notes receivable,	84,269 09
Investments,	67,370 94
	<hr/>
	\$9,931,887 66

LIABILITIES:—

Capital,	\$5,866,300 00
Bonds,	1,923,125 00
Notes payable,	1,243,349 96
Unpaid bills,	374,818 77
Unpaid dividends,	438 07
Interest due and unpaid,	11,374 50
Other items,	37,654 81
	<hr/>

\$9,457,061 11

Reserved and depreciation funds,	80,249 97
	<hr/>

\$9,537,311 08

Surplus,	394,576 58
	<hr/>

\$9,931,887 66

Of these companies—

Forty show an aggregate surplus of	\$126,759 95
Twelve show an aggregate deficit of	32,183 37
	<hr/>

Leaving total net surplus, as shown above,	\$394,576 58
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Which, added to reserves carried as liabilities,	80,249 97
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Would show an actual surplus of	\$474,826 55
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Equivalent to per cent. on capital of about	9
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The following table shows the value of the plant of each company, as assessed by the local authorities:—

NAME OF COMPANY.	Assessed Valuation.	NAME OF COMPANY.	Assessed Valuation.
Adams,	\$18,000	Middleborough,	\$23,200
Andover,	13,000	Milford,	26,500
Blue Hill (Canton),	-	Millbury,	15,000
Boston,	525,550	Nantucket,	-
Bridgewater,	15,900	Natick,	-
Cambridge,	200,000	Northampton,	40,000
Cohasset,	2,000	North Attleborough,	47,550
Dedham,	50,000	North Shore (Revere),	70,000
Edison (Boston),	418,500	Orange,	7,500
Edison (Brockton),	46,500	Palmer,	6,600
Edison (Fall River),	53,000	Pittsfield,	100,000
Edison (Lawrence),	60,000	Plymouth,	26,650
E. L. and Patent Flooring Co. (Amesbury),	28,000	Quincy,	45,300
Fall River,	80,000	Salem,	161,600
Framingham,	50,000	Somerville,	90,900
Franklin (Turner's Falls),	9,000	South Hadley Falls,	3,500
Gardner,	25,000	Suburban (Boston),	1,500
Gloucester,	14,000	Taunton,	20,000
Great Barrington,	3,500	Union (Franklin),	13,600
Greenfield,	27,000	United (Springfield),	268,400
Haverhill,	45,000	Uxbridge & Northbridge,	15,000
Hudson,	2,500	Walworth (Boston),	-
Hyde Park,	68,000	Ware,	20,000
Leicester,	15,750	Westborough,	9,300
Leominster,	22,700	Weymouth,	40,100
Lowell,	130,160	Whitman,	12,000
Malden,	100,000	Winchendon,	5,000
Marlborough,	13,000	Woburn,	47,040
		Worcester,	228,000

The following table shows the amount paid by each company for taxes:—

NAME OF COMPANY.	Taxes paid.	NAME OF COMPANY.	Taxes paid.
Adams,	\$154 76	Edison (Fall River),	\$981 50
Amherst,	162 56	Edison (Lawrence),	951 28
Andover,	293 65	E. L. and Patent Flooring Co. (Amesbury),	627 96
Athol,	125 00	Fall River,	1,763 68
Beverly,	298 02	Fitchburg,	629 12
Blue Hill (Canton),	823 31	Framingham,	793 88
Boston,	16,227 84	Franklin (Turner's Falls),	164 53
Bridgewater,	157 82	Gardner,	554 36
Brookline,	1,255 66	Gloucester,	327 27
Cambridge,	2,874 41	Great Barrington,	176 37
Charlestown,	1,612 47	Greenfield,	396 73
Chelsea,	900 00	Haverhill,	1,384 90
Chicopee,	130 57	Holvoke,	420 49
Citizens' (Wakefield),	175 00	Hudson,	55 96
Clinton,	162 11	Hyde Park,	1,044 76
Cottage City,	96 96	Lawrence,	1,474 57
Dedham,	518 20	Lee,	208 21
Edison (Boston),	7,090 16	Leicester,	148 32
Edison (Brockton),	798 03		

NAME OF COMPANY.	Taxes paid.	NAME OF COMPANY.	Taxes paid.
Leominster,	\$514 05	Salem,	\$2,855 38
Lowell,	2,594 97	Somerville,	1,775 08
Lynn,	2,361 86	Southbridge,	436 05
Malden,	1,217 04	South Hadley Falls,	144 72
Marlborough,	364 36	Spencer,	159 22
Milford,	538 03	Stoughton,	59 50
Millbury,	225 00	Suburban,	662 18
Nantucket,	—	Taunton,	528 01
Natick,	669 06	Union (Franklin),	145 53
New Bedford,	5,000 96	United (Springfield),	3,392 81
Newburyport,	873 19	Uxbridge and Northbridge,	316 92
Newton,	700 00	Waltham,	911 53
North Adams,	142 65	Walworth (Boston),	16 69
Northampton,	633 28	Webster,	273 07
North Attleborough,	872 84	Westborough,	150 45
North Shore (Revere),	565 89	Westfield,	253 28
Orange,	351 11	Weymouth,	666 64
Palmer,	360 00	Whitman,	275 04
Pittsfield,	570 00	Winchendon,	160 27
Plymouth,	366 98	Woburn,	1,883 39
Quincy,	715 43	Worcester,	3,210 77

DIVIDENDS.

The dividends declared by the several companies during the year are shown in the following table :—

NAME OF COMPANY.	Rate Per Cent.	Amount of Dividends.
Adams,	—	* —
Andover,	—	* —
Blue Hill (Canton),	—	* —
Boston,	6	\$62,280 00
Bridgewater,	—	* —
Cambridge,	6	12,000 00
Chicopee,	—	* —
Cohasset,	—	* —
Dedham,	3	1,800 00
Edison (Boston),	5½	63,800 00
Edison (Brockton),	6	5,100 00
Edison (Fall River),	7	5,980 00
Edison (Lawrence),	—	* —
E. L. and Patent Flooring Co. (Amesbury),	3	1,143 00
Fall River,	6	5,850 00
Framingham,	—	* —
Franklin,	4	400 00
Gardner,	—	* —
Gloucester,	—	* —
Great Barrington,	—	* —
Greenfield,	—	* —
Haverhill,	8	6,800 00
Hudson,	—	* —

* No dividend declared.

NAME OF COMPANY.	Rate Per Cent.	Amount of Dividends.
Hyde Park,	1½	\$1,500 00
Leicester,	—	* —
Leominster,	—	* —
Lowell,	8	16,872 00
Malden,	8	10,690 00
Marlborough,	3	900 00
Milford,	2	800 00
Millbury,	—	* —
Nantucket,	—	—
Natick,	—	* —
Northampton,	5	2,935 00
North Attleborough,	10	6,160 00
North Shore (Revere),	—	* —
Orange,	—	* —
Palmer,	—	* —
Pittsfield,	—	* —
Plymouth,	—	* —
Quincy,	5	2,500 00
Salem,	6	8,400 00
Somerville,	6	8,208 00
South Hadley Falls,	—	* —
Suburban,	—	* —
Taunton,	7	2,800 00
Union (Franklin),	—	* —
United (Springfield),	6	18,000 00
Uxbridge and Northbridge,	—	* —
Walworth (Boston),	—	* —
Ware,	—	* —
Westborough,	1	250 00
Weymouth,	—	* —
Whitman,	—	* —
Winchendon,	—	* —
Woburn,	3	1,800 00
Worcester,	8	16,000 00
		<hr/>
		\$262,968 00

* No dividend declared.

The following table shows the system used, the maximum dynamo capacity and nominal candle-power of the lamps of each company, June 30, 1891 : —

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- Power.
Adams,	Thomson-Houston, .	{ 45	1,200
Amherst,	Westinghouse, . .	{ 500	16
Andover,	Westinghouse, . .	{ 750	16
Athol,	Thomson-Houston, .	{ 50	1,200
Beverly,	Thomson-Houston, .	{ 1,300	16
		{ 25	2,000
		{ 35	2,000
		{ 650	16
Blue Hill (Canton), .	{ Waterhouse, . . .	{ 55	1,700
	{ Westinghouse, . .	{ 750	16
	{ Thomson-Houston, .	{ 1,410	2,000
	{ Brush,	{ 1,455	2,000
Boston,	{ American,	{ 50	2,000
	{ Thomson-Houston, .	{ 5,550	16
	{ Weston,	{ 1,540	16
	{ Sun,	{ 900	16
Bridgewater,	{ Waterhouse, . . .	{ 35	2,000
	{ Westinghouse, . .	{ 750	16
	{ American,	{ 50	2,000
Brookline,	{ Thomson-Houston, .	{ 250	2,000
	{ Thomson-Houston, .	{ 1,000	16
	{ Westinghouse, . .	{ 900	16
		{ 150	2,000
Cambridge, ¹	Thomson-Houston, .	{ 180	1,200
		{ 3,900	16
Charlestown,	Brush,	{ 300	2,000
Chelsea,	Thomson-Houston, .	{ 250	1,200
		{ 1,950	16
Chicopee,	Thomson-Houston, .	{ 50	1,200
Citizens' (Wakefield), .	Thomson-Houston, .	{ 45	1,200
		{ 650	16
Clinton,	{ Schuyler,	{ 90	1,200
	{ Thomson-Houston, .	{ 1,300	16
Cohasset,	Thomson-Houston, .	{ 650	16
Cottage City,	Ball,	{ 60	1,600
Dedham,	Thomson-Houston, .	{ 60	1,200
		{ 1,300	16
Easthampton,	Waterhouse, . . .	{ 40	1,800
Edison (Boston), . . .	Edison,	{ 51,200	16
	{ Thomson-Houston, .	{ 110	2,000
Edison (Brockton), ² .	{ Edison,	{ 50	2,000
	{ Edison Municipal, .	{ 886	15
	{ Edison,	{ 4,500	16
Edison (Fall River), .	{ Edison,	{ 4,640	16
	{ American,	{ 35	2,000
Edison (Lawrence), .	{ Edison,	{ 5,600	16
	{ Edison Municipal, .	{ 800	20

¹ Motor generators 720 H. P.² Motor generators 80 H. P.

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- Power.
E. L. and Patent Flooring Co. (Amesbury), . . .	{ Thomson-Houston, . . .	{ 90	1,200
	{ Westinghouse, . . .	{ 500	16
Fall River, . . .	Thomson-Houston, . . .	{ 500	16
		{ 150	2,000
Fitchburg, . . .	Thomson-Houston, . . .	{ 226	1,200
		{ 650	16
Framingham, . . .	Thomson-Houston, . . .	{ 225	1,200
		{ 1,300	16
Franklin (Turner's Falls),	Thomson-Houston, . . .	{ 120	1,200
		{ 2,450	16
Gardner, . . .	Thomson-Houston, . . .	{ 30	2,000
		{ 600	16
Gloucester, . . .	Thomson-Houston, . . .	{ 100	1,200
		{ 1,000	16
Great Barrington, . . .	{ Schuyler, . . .	{ 138	1,200
		{ 60	1,500
		{ 500	16
Greenfield, . . .	{ Edison, . . .	{ 500	16
		{ Westinghouse, . . .	16
		{ 45	1,200
Haverhill, . . .	{ Thomson-Houston, . . .	{ 800	16
		{ Westinghouse, . . .	16
		{ 75	2,000
Holyoke, . . .	{ Thomson-Houston, . . .	{ 95	1,200
		{ 800	20
		{ 50	2,000
Hudson, . . .	{ Brush, . . .	{ 1,000	16
		{ 386	2,000
		{ 180	1,200
Hyde Park, . . .	{ Edison, . . .	{ 1,000	16
		{ 45	1,200
		{ 650	16
Lawrence, . . .	Thomson-Houston, . . .	{ 200	2,000
		{ 1,950	16
Lee, . . .	Thomson-Houston, . . .	300	2,000
Leicester, . . .	Thomson-Houston, . . .	1,300	16
Leominster, ¹ . . .	Thomson-Houston, . . .	{ 850	16
		{ 100	1,200
Lowell, . . .	Thomson-Houston, . . .	{ 1,300	16
		{ 630	2,000
Lynn, ² . . .	Thomson-Houston, . . .	{ 3,600	20
		{ 435	2,000
Malden, . . .	Thomson-Houston, . . .	{ 100	1,200
		{ 4,550	16
Marlborough, . . .	Thomson-Houston, . . .	{ 245	1,200
		{ 3,800	16
		{ 105	2,000
Middleborough, . . .	{ Schuyler, . . .	{ 95	1,200
		{ Edison, . . .	16
	{ Thomson-Houston, . . .	{ 1,000	16
		{ 35	1,200
	{ Waterhouse, . . .	{ 650	16
		{ 35	1,800

¹ Motor generators 50 H. P.² Motor generators 255 H. P.

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- Power.
Milford,	Thomson-Houston, .	95 750	1,200 16
Millbury,	Thomson-Houston, .	50 650	1,200 16
Milton,	Thomson-Houston, .	50 650	2,000 16
Nantucket,	—	—	—
Natick,	Thomson-Houston, .	90 2,600	1,200 16
New Bedford, ¹	Thomson-Houston, .	265	2,000
	Thomson-Houston, .	118	1,200
	American,	110	2,000
	Edison,	7,440	16
Newburyport,	Westinghouse,	100 5,800	1,600 16
	Thomson-Houston, .	170 800	1,200 16
Newton,	Thomson-Houston, .	95 3,000	1,200 16
	Thomson-Houston, .	135	1,200
North Adams,	Thomson-Houston, .	500	16
	Thomson-Houston, .	140	1,200
Northampton,	Thomson-Houston, .	1,950	16
	Schuyler,	90	1,200
North Attleborough,	Thomson-Houston, .	310	1,200
	Thomson-Houston, .	200	1,200
North Shore (Revere), ²	Thomson-Houston, .	1,950	16
	Thomson-Houston, .	50	1,200
Orange,	Thomson-Houston, .	1,000	16
	Thomson-Houston, .	50	1,200
Palmer,	Thomson-Houston, .	650	16
	Thomson-Houston, .	125	1,200
Pittsfield, ³	Westinghouse,	3,000	16
	Thomson-Houston, .	100	1,200
Plymouth, ⁴	Thomson-Houston, .	1,000	16
	Thomson-Houston, .	130	1,200
Quincy,	Thomson-Houston, .	1,000	16
	Westinghouse,	1,600	16
Salem,	Thomson-Houston, .	360	2,000
	Thomson-Houston, .	2,600	16
Somerville,	Thomson-Houston, .	350	2,000
	Thomson-Houston, .	1,000	16
	American,	50	2,000
	Electro-Dynamic Co., .	600	25
Southbridge,	Thomson-Houston, .	100	1,200
	Thomson-Houston, .	600	16
South Hadley Falls,	Thomson-Houston, .	900	16
Spencer,	Ball,	70	1,200
Stoughton,	Ball,	70	800
Suburban,	Waterhouse,	70	1,800
	Westinghouse,	3,750	16

¹ Motor generators 180 H. P.² Motor generators 280 H. P.³ Motor generators 220 H. P.⁴ Motor generators 140 H. P.

NAME OF COMPANY.	System used.	Maximum Dynamo Capacity.	Nominal Candle- Power.
Taunton,	{ Arnoux Hochhausen, .	10	2,000
	{ Brush,	225	1,200
	{ Thomson-Houston, .	600	16
Union (Franklin), . .	{ Thomson-Houston, .	650	16
	{ Thomson-Houston, .	50	1,200
United (Springfield), .	{ Thomson-Houston, .	1,150	16
	{ Thomson-Houston, .	575	1,200
Uxbridge and North- bridge,	{ Westinghouse, . . .	6,650	16
	{ Westinghouse, . . .	60	2,000
Waltham,	{ Westinghouse, . . .	1,500	16
	{ Thomson-Houston, .	195	1,200
Walworth (Boston), ¹ .	{ Thomson-Houston, .	2,350	20
	{ American,	75	1,200
Ware,	{ Thomson-Houston, .	900	16
	{ Thomson-Houston, .	50	1,200
Webster,	{ Thomson-Houston, .	650	16
	{ Thomson-Houston, .	80	1,200
Westborough, . . .	{ Thomson-Houston, .	500	20
	{ Thomson-Houston, .	50	1,200
Westfield,	{ Thomson-Houston, .	950	16
	{ Schuyler,	45	1,200
Weymouth,	{ Thomson-Houston, .	60	2,000
	{ Thomson-Houston, .	500	16
Whitman,	{ Thomson-Houston, .	200	1,200
	{ Thomson-Houston, .	1,300	16
Winchendon,	{ Thomson-Houston, .	50	1,200
	{ Thomson-Houston, .	500	16
Woburn,	{ Thomson-Houston, .	30	1,200
	{ Thomson-Houston, .	650	16
Worcester,	{ Thomson-Houston, .	185	2,000
	{ Thomson-Houston, .	100	1,200
	{ Brush,	1,800	16
	{ Edison,	45	1,200
	{ Thomson-Houston, .	800	16
	{ Thomson-Houston, .	585	2,000
		1,950	16

¹ Motor generators 30 H. P.

The following table shows the number of electric lights of various candle-power represented by the dynamo capacity, June 30, 1889–1890 and 1891:—

	1889.	1890.	1891.
16 candle-power,	80,075	140,870	181,270
20 “ “	2,800	1,700	8,530
15 “ “	880	880	836
2,000 “ “	6,978	8,425	8,401
1,200 “ “	4,206	6,085	6,447
1,600 “ “	130	60	160
1,500 “ “	35	60	60
1,800 “ “	40	40	200
800 “ “	140	70	70

The following table shows the number of boilers, their total rated horse-power, the number of engines, and the total rated horse-power of the same, and the number of dynamos of the different companies on June 30 last; also the number of tons of coal used during the year ending on that day:—

NAME OF COMPANY.	Number of Boilers.	Total rated Horse-power.	Number of Engines.	Total rated Horse-power.	Number of Dynamos.	Coal used. Tons.
Adams,	2	150	2	225	2	845
Amherst,	1	100	1	75	1	250
Andover,	2	200	2	180	3	439
Athol,	1	120	1	65	1	¹ 95
Beverly,	2	154	2	210	2	² 225
Blue Hill (Canton),	1	130	1	130	3	230
Boston,	²¹	2,575	³⁴	3,341	78	18,295
Bridgewater,	1	75	1	80	2	289
Brookline,	3	375	5	460	8	³ 318
Cambridge,	8	1,000	6	1,140	19	7,000
Charlestown,	5	625	5	300	10	⁴ 771
Chelsea,	2	250	4	344	7	⁵ 868
Chicopee,	1	100	1	65	1	⁶ —
Citizens' (Wakefield),	2	250	1	125	2	⁷ —
Clinton,	2	250	2	325	4	618
Cohasset,	1	150	1	100	1	⁸ 91
Cottage City,	1	60	1	50	2	⁹ 63
Dedham,	2	220	2	170	4	¹⁰ 392
Easthampton,	¹¹ —	—	—	—	—	—
Edison (Boston),	16	3,600	32	4,320	64	12,000
Edison (Brockton),	6	720	5	475	12	2,185
Edison (Fall River),	4	426	4	460	8	1,281
Edison (Lawrence),	4	438	6	550	11	¹² 1,762
Electric Light & Patent Flooring Co (Amesbury),	2	250	3	435	5	1,260
Fall River,	4	400	5	350	9	1,347
Fitchburg,	3	300	3	300	6	¹² 275
Framingham,	2	250	2	250	7	¹⁴ —
Franklin,	¹⁵ —	—	—	—	2	—
Gardner,	2	160	3	200	4	716
Gloucester,	2	185	2	128	5	¹⁶ 350
Great Barrington,	1	95	2	160	5	437
Greenfield,	2	225	3	225	4	¹⁷ 800
Haverhill,	3	375	3	365	8	1,667
Holyoke, ¹⁸	—	—	—	—	20	—

¹ Nine months only.² Also 186 bushels coke.³ Also coke from gas works.⁴ Also 367 tons coke.⁵ Also 117½ tons screenings, 11 tons breeze.⁶ 6,831 bushels coke.⁷ Coke from gas works used. Works ran only a portion of the year.⁸ Also 51 tons screenings. Works in operation nine and one-half months.⁹ Works run only in summer.¹⁰ Also 165 tons screenings and sparks.¹¹ Power leased.¹² Also 214 tons screenings.¹³ Also 334 tons coke.¹⁴ Not returned.¹⁵ Water wheel, 40 H. P.¹⁶ Also 205 tons screenings.¹⁷ Also fifty cords wood.¹⁸ 2 water wheels 370 H. P.

NAME OF COMPANY.	Number of Boilers.	Total rated Horse- power.	Number of Engines.	Total rated Horse- power.	Number of Dynamos.	Coal used. Tons.
Hudson,	1	80	1	60	2	177
Hyde Park,	2	250	3	375	6	¹ 525
Lawrence,	2	300	3	300	6	² 270
Lee,	2	180	³ 1	80	2	150
Leicester,	1	80	⁴ 1	60	2	207
Leominster,	2	250	3	250	5	⁵ 481
Lowell,	7	1,050	4	1,250	16	⁶ 4,000
Lynn,	7	775	5	1,150	21	3,319
Malden,	4	500	6	525	11	2,801
Marlborough,	2	210	3	200	7	⁷ 356
Middleborough,	1	80	⁸ 2	120	3	⁹ 98
Milford,	2	170	2	120	5	700
Millbury,	2	100	2	100	2	277
Milton,	1	180	1	150	2	—
Nantucket,	—	—	—	—	—	—
Natick,	2	250	2	600	4	¹⁰ 445
New Bedford,	11	1,200	13	1,605	33	¹¹ 5,070
Newburyport,	2	200	2	180	7	625
Newton,	4	600	5	425	6	¹² 1,420
North Adams,	1	150	2	210	4	¹³ 132
Northampton,	3	290	3	305	6	¹⁴ 800
North Attleborough,	3	370	¹⁵ 4	440	9	1,871
North Shore (Revere),	4	455	4	515	8	¹⁶ 819
Orange,	2	120	2	185	3	379
Palmer,	1	125	1	100	2	337
Pittsfield,	4	410	5	590	11	760
Plymouth,	2	250	2	375	5	928
Quincy,	3	375	4	550	6	1,432
Salem,	4	500	3	860	14	3,886
Somerville,	3	550	4	470	10	1,805
Southbridge,	2	185	2	185	3	381
South Hadley Falls,	¹⁷ —	—	1	100	2	—
Spencer,	—	—	¹⁸ —	—	2	—
Stoughton,	1	60	1	50	1	—
Suburban (Boston),	2	300	2	900	5	1,350
Taunton,	4	525	3	325	8	600
Union (Franklin),	2	200	2	150	3	395
United (Springfield),	5	1,160	4	1,650	18	4,124
Uxbridge and Northbridge,	2	199	2	185	3	505
Waltham,	4	531	4	475	8	¹⁹ 381

¹ Also 221 tons sparks.² Also 770 tons breeze. Steam used in gas works also.³ Also water wheel, 60 H. P.⁴ Also 2 water wheels, 60 H. P.⁵ Also 41 tons of other fuel.⁶ Also 500 tons of other fuel.⁷ Also 218 tons screenings.⁸ Also 2 water wheels, 180 H. P.⁹ Return for six months only.¹⁰ Also 765 tons sparks.¹¹ Also 1,232 tons of other fuel.¹² Also 862 chaldrons coke.¹³ Also 23,833 bushels coke.¹⁴ Also 100 cords of wood.¹⁵ Also water wheel 30 H. P.¹⁶ Also 76 tons screenings.¹⁷ Steam bought.¹⁸ 3 15 H. P. gas engines; used 1,203,000 feet of gas.¹⁹ Also 41,241 bushels coke.

NAME OF COMPANY.	Number of Boilers.	Total rated Horse- power.	Number of Engines.	Total rated Horse- power.	Number of Dynamoes.	Coal used. Tons.
Walworth (Boston),	6	330	2	200	4	1,566
Ware,	1	125	1	125	2	125
Webster,	2	230	2	140	3	391
Westborough,	2	160	2	150	3	-
Westfield,	2	130	2	140	4	354
Weymouth,	2	300	2	325	6	1,678
Whitman,	² -	-	1	90	2	-
Winchendon,	1	60	1	40	2	171
Woburn,	4	500	6	575	11	2,228
Worcester,	8	1,200	2	900	19	2,607

¹ Also 122 tons screenings.² Steam bought.

The following table shows, in feet, the total length of wire; the length of underground conduit, the length of the wires in the same; the number of poles set in streets and ways, and the length of streets with overhead wires of each company, on June 30 last:—

NAME OF COMPANY.	Total Length of Wire. Feet.	Length of Wires in Conduit. Feet.	Length of Under- ground Conduit. Feet.	Number of Poles set in Streets.	Length of Street with Over- head Wires. Feet.
Adams,	80,460	—	—	160	29,700
Amherst,	22,550	—	—	75	7,000
Andover,	60,736	—	—	443	20,242
Athol,	30,000	—	—	160	30,000
Beverly,	52,200	—	—	204	23,148
Blue Hill (Canton),	171,600	—	—	590	171,600
Boston,	2,042,318	—	—	1,951	—
Bridgewater,	101,480	—	—	238	38,530
Brookline,	461,660	—	—	1,230	237,600
Cambridge,	711,400	—	—	997	184,800
Charlestown,	209,000	—	—	305	—
Chelsea,	317,040	—	—	1,454	179,520
Chicopee,	21,120	—	—	200	21,120
Citizens' (Wakefield),	262,000	—	—	530	79,200
Clinton,	334,200	—	—	600	89,200
Cohasset,	253,440	—	—	914	103,098
Cottage City,	121,440	—	—	60	21,120
Dedham,	512,994	—	—	1,162	163,680
Easthampton,	37,000	—	—	225	28,000
Edison (Boston),	578,160	530,640	176,880	240	15,840
Edison (Brockton),	468,958	21,000	7,000	1,650	182,000
Edison (Fall River),	96,450	27,000	9,000	42	12,000
Edison (Lawrence),	507,647	72,797	7,200	1,198	213,840
E. L. and Patent Flooring Co. (Amesbury),	200,640	—	—	250	52,800
Fall River,	277,200	—	—	741	97,680
Fitchburg,	179,740	—	—	443	67,850
Framingham,	—	—	—	900	132,000
Franklin (Turner's Falls),	12,000	—	—	86	9,000
Gardner,	192,510	—	—	445	45,000
Gloucester,	97,000	—	—	135	70,000
Great Barrington,	70,343	—	—	278	40,840
Greenfield,	31,000	—	—	157	25,000
Haverhill,	206,500	—	—	500	158,400
Holyoke,	306,317	—	—	800	100,000
Hudson,	35,285	—	—	71	10,793
Hyde Park,	186,880	—	—	620	67,600
Lawrence,	205,920	—	—	406	68,640
Lee,	52,800	—	—	140	15,840
Leicester,	152,794	—	—	465	50,160
Leominster,	267,550	—	—	475	51,780
Lowell,	550,000	—	—	1,000	—
Lynn,	1,008,730	—	—	2,900	475,200

NAME OF COMPANY.	Total Length of Wire. Feet.	Length of Wires in Conduit. Feet.	Length of Under- ground Conduit. Feet.	Number of Poles set in Streets.	Length of Street with over- head Wires. Feet.
Malden,	1,794,500	-	-	4,000	520,000
Marlborough,	106,965	-	-	200	50,000
Middleborough,	82,200	-	-	335	-
Milford,	136,600	-	-	-	-
Millbury,	73,920	-	-	150	21,120
Milton,	422,400	-	-	550	422,400
Nantucket,	-	-	-	-	-
Natick,	242,880	-	-	500	63,360
New Bedford,	670,860	24,000	8,000	1,032	175,000
Newburyport,	211,000	-	-	400	150,000
Newton,	1,096,500	1,500	1,500	3,643	-
North Adams,	91,708	-	-	300	45,000
Northampton,	322,176	-	-	600	134,800
North Attleborough,	372,860	-	-	901	-
North Shore (Revere),	673,050	-	-	1,357	195,360
Orange,	64,231	-	-	240	26,000
Palmer,	86,980	-	-	205	38,280
Pittsfield,	288,938	1,000	500	712	98,500
Plymouth,	169,336	-	-	407	64,027
Quincy,	491,040	-	-	1,100	258,720
Salem,	424,500	-	-	730	200,000
Somerville,	1,032,200	-	-	2,500	-
Southbridge,	112,262	-	-	362	15,840
South Hadley Falls,	400,400	-	-	226	38,000
Spencer,	41,676	-	-	397	-
Stoughton,	47,520	-	-	250	47,520
Suburban (Boston),	-	-	-	-	39,600
Taunton,	158,400	-	-	300	-
Union (Franklin),	115,320	-	-	400	42,300
United (Springfield),	475,590	38,250	9,500	617	225,000
Uxbridge and Northbridge,	132,440	-	-	425	43,000
Waltham,	163,300	-	-	356	49,570
Walworth (Boston),	19,400	-	-	-	-
Ware,	51,760	-	-	209	-
Webster,	70,920	-	-	325	48,000
Westborough,	102,494	-	-	248	-
Westfield,	79,360	-	-	206	38,000
Weymouth,	743,100	-	-	1,375	-
Whitman,	116,160	-	-	720	95,040
Winchendon,	91,005	-	-	185	28,680
Woburn,	796,660	-	-	3,000	348,480
Worcester,	572,760	-	-	1,612	-

The following table shows the number of motors furnished off arc, incandescent and power circuits, the number of single and double arc lamps, and the number of plain and copper-coated carbons used during the year : —

NAME OF COMPANY.	Motors off Arc Circuits.	Motors off Incandescent Circuits.	Motors off Power Circuits.	Horse-Power of Motors.	Number of Single Arc Lamps.	Number of Double Arc Lamps.	Number of Plain Carbons Used.	Number of Copper-coated Carbons Used.
Adams,	-	-	-	-	-	42	-	16,600
Amherst,	-	-	-	-	-	-	-	-
Andover,	-	-	-	-	1	30	10,000	-
Athol,	-	-	-	-	24	-	-	7,000
Beverly,	-	-	-	-	30	8	-	13,000
Blue Hill (Canton),	-	-	-	-	6	44	-	8,000
Boston,	82	14	-	189	958	1,905	-	1,757,953
Bridgewater,	-	-	-	-	33	2	-	9,876
Brookline,	-	-	8	72½	20	202	-	130,000
Cambridge,	-	-	41	780	26	177	-	125,000
Charlestown,	1	-	-	1	21	133	-	131,994
Chelsea,	-	-	1	½	60	156	10,000	62,000
Chicopee,	-	-	-	-	45	-	5,000	16,000
Citizens' (Wakefield),	-	-	-	-	-	29	400	400
Clinton,	2	-	-	7½	52	-	20,689	-
Cohasset,	-	-	-	-	-	-	-	-
Cottage City,	-	-	-	-	52	-	5,000	-
Dedham,	-	-	-	-	-	30	11,013	-
Easthampton,	-	-	-	-	33	-	-	-
Edison (Boston),	-	659	-	2,069	-	-	-	-
Edison (Brockton),	-	27	-	125	60	-	-	48,000
Edison (Fall River),	-	-	-	130	-	-	-	-
Edison (Lawrence),	-	44	-	94	34	2	31,000	-
Electric Light and Patent Flooring Co. (Amesbury),	-	-	6	15	67	4	-	12,000
Fall River,	-	-	-	-	178	148	65,000	86,000
Fitchburg,	-	-	-	-	66	107	-	65,000
Framingham,	-	-	-	-	6	72	-	30,000
Franklin (Turner's Falls),	-	-	-	-	22	-	-	3,500
Gardner,	-	1	-	3	13	29	-	-
Gloucester,	-	-	-	-	54	-	15,000	5,000
Great Barrington,	-	-	-	-	36	-	7,500	2,500
Greenfield,	-	4	-	11	43	4	15,000	-
Haverhill,	-	30	-	27	85	90	2,000	125,000
Holyoke,	-	-	-	-	275	160	120,000	-
Hudson,	-	-	2	-	18	4	3,000	5,000
Hyde Park,	-	-	-	-	12	2	43,159	-
Lawrence,	-	-	-	-	143	97	-	58,600
Lee,	-	-	-	-	-	-	-	-
Leicester,	-	-	-	-	-	-	-	-
Leominster,	-	-	1	15	18	63	5,500	14,280
Lowell,	57	-	-	298	330	196	-	-
Lynn,	-	-	27	241	176	250	-	234,000
Malden,	-	1	-	1	200	25	10,000	85,000
Marlborough,	-	-	-	-	50	35	35,000	-
Middleborough,	-	-	-	-	-	20	2,541	-
Milford,	-	7	-	22½	80	-	16,000	-
Millbury,	-	2	-	2	29	-	-	10,000
Nantucket,	-	-	-	-	-	-	-	-
Natick,	-	-	8	47	6	56	3,000	15,000
New Bedford,	-	35	28	210½	312	145	30,273	80,869
Newburyport,	-	9	-	10½	143	2	-	45,000
Newton,	-	-	-	-	-	84	-	42,000
North Adams,	-	-	-	-	44	81	60,000	-

NAME OF COMPANY.	Motors off Arc Circuits.	Motors off Incandescent Circuits.	Motors off Power Cir- cuits.	Horse-Power of Motors.	Number of Single Arc Lamps.	Number of Double Arc Lamps.	Number of Plain Carbons Used.	Number of Copper- coated Carbons Used.
Northampton, . . .	-	-	-	-	112	-	25,000	-
North Attleborough, .	15	-	-	36 $\frac{1}{4}$	117	1	37,000	16,000
North Shore, . . .	-	-	9	125	101	40	1,000	23,951
Orange, . . .	-	-	-	-	30	-	11,455	-
Palmer, . . .	-	-	-	-	4	32	1,200	7,684
Pittsfield, . . .	-	-	13	330	71	40	16,944	-
Plymouth, . . .	-	-	9	132	31	3	8,039	1,658
Quincy, . . .	6	-	-	-	-	89	35,000	-
Salem, . . .	-	-	18	78	112	192	-	180,000
Somerville, . . .	10	-	-	19 $\frac{3}{8}$	6	250	3,000	120,000
Southbridge, . . .	-	-	-	-	91	7	18,000	-
South Hadley Falls, .	-	-	-	-	-	-	-	-
Spencer, . . .	-	-	-	-	70	-	22,000	-
Stoughton, . . .	-	-	-	-	69	-	-	-
Suburban (Boston), .	-	-	-	-	-	-	-	-
Taunton, . . .	-	-	-	-	150	65	-	43,000
Union (Franklin), . .	-	-	-	-	42	-	6,901	-
United (Springfield), .	-	-	26	79 $\frac{1}{4}$	176	386	25,090	265,010
Uxbridge and North- bridge, . . .	-	-	-	-	50	-	4,360	-
Waltham, . . .	-	7	-	34 $\frac{1}{2}$	111	16	11,125	18,200
Walworth (Boston), .	-	11	-	45 $\frac{1}{4}$	12	36	43,000	-
Ware, . . .	-	-	-	-	44	-	-	6,000
Webster, . . .	-	-	-	-	4	68	20,000	7,000
Westborough, . . .	-	-	-	-	31	-	1,000	9,000
Westfield, . . .	-	-	-	-	110	10	22,300	16,900
Weymouth, . . .	-	-	-	-	-	32	4,760	6,700
Whitman, . . .	-	-	-	-	42	-	7,108	-
Winchendon, . . .	-	-	-	-	19	-	4,728	1,000
Woburn, . . .	-	-	-	-	37	83	43,920	12,876
Worcester, . . .	-	-	-	-	250	331	-	379,625

The following table shows the number of commercial lights of the different kinds, and the number of customers for each kind, on June 30 last:—

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle- Power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle- Power.	Number of Consumers for Commercial In- candescent Lights only.	Number of Commercial Incandescent Lights off Arc Circuits.	Nominal Candle- Power.	Number of Consumers for Commercial In- candescent Lights off Arc Circuits only.	Number of Consumers for both Arc and In- candescent Lights.
Adams,	—	—	—	225	16	30	—	—	—	—
Andover,	—	—	—	1,000	16	63	—	—	—	—
Amherst,	—	—	—	876	16	80	—	—	—	—
Athol,	—	2,000	1	—	—	—	—	—	—	—
Beverly,	17	2,000	9	280	16	25	—	—	—	—
Blue Hill (Canton),	—	—	—	1,000	16	40	—	—	—	—
Boston,	1,248	2,000	260	6,160	16	179	26	32	54	47
	—	—	—	91	20	—	105	65	—	—
	—	—	—	195	32	—	—	—	—	—
Bridgewater,	—	—	—	60	125	—	—	—	—	—
Brookline,	—	—	—	857	16	61	—	—	—	—
Brookline,	29	2,000	13	2,240	16	50	—	—	—	—
Cambridge,	26	1,200	50	3,600	16	175	31	32	20	5
Charlestown,	36	2,000	23	—	—	—	42	65	—	4
	—	—	—	—	—	—	4	16	—	11
	—	—	—	—	—	—	61	—	—	2
Chelsea,	50	1,200	17	1,500	16	60	—	—	—	—
Citizens' (Wakefield),	—	—	—	200	16	39	—	—	—	—
Clinton,	8	1,200	8	631	16	54	—	—	—	—
Cohasset,	—	—	—	88	25	—	—	—	—	—
	—	—	—	66	16	5	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Cottage City,	25	1,600	10	—	—	—	—	—	—	—
Dedham,	9	1,200	1	1,090	16	72	—	—	—	—
Edison (Boston),	197	1,200	—	41,761	16	2,200	—	—	—	—
Edison (Brockton),	57	2,000	33	5,200	16	251	—	—	—	—

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle-Power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle-Power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Commercial Incandescent Lights off Arc Circuits.	Nominal Candle-Power.	Number of Consumers for Commercial Incandescent Lights only.	Number of Consumers for both Arc and Incandescent Lights.
Edison (Fall River),	36	2,000	3	7,000	16	430	-	-	-	26
Edison (Lawrence),	19	1,200	2	5,396	16	307	-	-	-	5
E. L. & Patent Flooring Co. (Amesbury),	178	1,200	35	600	16	115	-	-	-	-
Fall River,	18	2,000	16	150	16	14	-	-	-	-
Fitchburg,	72	1,200	16	412	16	74	-	-	-	5
	-	-	-	289	25	-	-	-	-	-
	-	-	-	23	32	-	-	-	-	-
Framingham,	23	1,200	2	-	-	65	15	65	1	2
Franklin (Turner's Falls),	-	-	-	263	16	23	28	32	-	-
Gardner,	35	1,200	3	1,000	16	108	17	20	-	9
Gloucester,	32	1,200	3	800	16	106	48	65	18	10
Great Barrington,	-	-	-	900	16	72	31	32	-	3
Greenfield,	10	1,200	3	1,125	16	100	5	60	2	6
Haverhill,	74	1,200	-	850	16	-	1	65	1	-
Holyoke,	234	2,000	83	650	20	-	-	-	-	9
Hudson,	10	1,200	3	745	16	51	23	65	1	6
Hyde Park,	42	2,000	7	416	16	23	-	-	-	12
Lawrence,	145	2,000	64	2,351	16	149	-	-	-	-
Lee,	-	-	-	700	16	95	-	-	-	-
Leicester,	-	-	-	597	16	41	-	-	-	-
Leominster,	27	1,200	8	1,904	16	117	1	32	-	5
Lowell,	317	2,000	99	2,389	20	160	-	-	-	34
Lynn,	178	2,000	75	1,724	16	115	37	65	15	17
	2	1,200	-	-	-	-	2	32	-	-

NAME OF COMPANY.	Number of Commercial Arc Lights.	Nominal Candle- Power.	Number of Consumers for Commercial Arc Lights only.	Number of Commercial Incandescent Lights.	Nominal Candle- Power.	Number of Consumers for Commercial In- candescent Lights only.	Number of Commercial Incandescent Lights off Arc Circuits.	Nominal Candle- Power.	Number of Consumers for Commercial In- candescent Lights off Arc Circuits only.	Number of Consumers for both Arc and In- candescent Lights.
Suburban (Boston),	70	1,800	47	3,000	16	268	-	-	-	3
Taunton,	75	1,200	34	750	16	59	-	-	-	1
Union (Franklin),	7	1,200	1	956	16	80	-	-	-	23
United (Springfield),	176	1,200	13	3,374	16	199	-	-	-	-
Uxbridge and Northbridge,	-	-	-	-	-	-	-	-	-	-
Waltham,	68	1,200	14	1,626	16	90	-	-	-	19
Walworth (Boston),	45	1,200	14	862	16	128	-	-	-	9
Ware,	3	1,200	2	605	16	55	-	-	-	2
Webster,	20	1,200	10	325	20	70	-	-	-	-
Westborough,	-	1,200	2	799	16	86	-	-	-	-
Westfield,	10	1,200	3	350	16	65	-	-	-	-
Weymouth,	-	1,200	-	2,329	16	145	-	-	-	-
Whitman,	13	1,200	2	865	16	58	-	-	-	2
Winchendon,	9	1,200	3	478	16	30	-	-	-	2
Woburn,	35	2,000	4	2,631	16	220	-	-	-	21
Worcester,	271	2,000	93	1,735	16	61	-	-	-	-

The following table shows the number of public lamps, their candle-power, the number of hours burnt per night, the number of nights per month, and the price paid: —

NAME OF COMPANY.	Number of Public Lamps.	Nominal Candle-power.	Number of hours per night.	Number of nights per month.	PRICE PAID.
Adams,	40	1,200	Dark to midnight, .	Every dark night, .	\$75 per year.
Amherst,	6	32	—	Every night, . . .	{ Furnished free for privilege of occupying streets.
Andover,	{ 31	1,200	Until 12.30 A M., .	Every dark night, .	{ 26½ cents per night.
	{ 57	25	Until 12.30 A M., .	Every dark night, .	{ 5½ cents per night for 25 lights; 32 furnished free.
Athol,	{ 23	2,000	Until midnight, .	Moon schedule, .	{ \$75 per year.
	{ 19	32	"	"	{ \$15 per year.
Beverly,	{ 19	2,000	Sunset to midnight, .	Every night, . . .	{ 50 cents per night.
	{ 55	1,700	6 hours,	26 nights,	{ 19 cents per night.
Blue Hill (Canton),	{ 58	16	6 hours,	26 nights,	{ 5 cents per night.
	{ 1,153	2,000	All night,	Every night, . . .	{ 40 cents per night.
Boston,	{ 318	16	"	"	{ Average 10 cents each.
	{ 40	65	"	"	{
	{ 4	32	"	"	{
Bridgewater,	35	2,000	Average 6 hours, .	Average 25 nights, .	{ \$70 per year.
Brookline,	203	2,000	All night,	Every night, . . .	{ 40 cents per night.
	4	65	—	"	{
Cambridge,	134	2,000	All night,	Every night, . . .	{ \$180 per year.
	43	1,200	"	"	{ \$115 per year.
	200	40	"	"	{ \$30 per year.
Charlestown,	117	2,000	All night,	Every night, . . .	{ 40 cents per night.
	154	1,200	All night,	25 nights,	{ 30 cents per night.
Chelsea,	206	25	Until 12.30 A M., .	"	{ \$14 per year.

NAME OF COMPANY.	Number of Public Lamps.	Nominal Candle-power.	Number of hours per night.	Number of nights per month.	Price Paid.
Chicopee,	45	1,200	Dark to 1 A.M., .	Moon schedule, .	\$80 per year.
Citizens' (Wakefield),	{ 29 10	1,200 25	- -	- -	{ Lights not run now. Run 3½ months free.
Clinton,	{ 39 135	1,200 } 25 }	Dark to midnight, .	Moon schedule, .	{ 25 cents per night. 5½ cents per night.
Cobasset,	180	30	Dark to 1 A.M., .	Moon schedule, .	6½ cents per night.
Cottage City,	17	1,600	5 hours,	{ Every night during the season } { of 90 days, . }	47 cents per night.
Dedham,	{ 20 348	1,200 } 26 }	Dark to 12 30 A.M., .	Every dark hour, .	{ Ten-year contract, 19 acres and 314 incandescents for \$5,000 per year. Additional lights, are \$70, incandescent \$16 each, per year.
Easthampton,	33	1,800	5½ hours,	25 nights,	\$62.50 per year
Edison (Brockton),	25	2,000	6½ hours,	Every night,	47.9 cents per night.
Edison (Lawrence),	450	15	6½ hours,	24 nights,	\$14.75 per year.
Edison (Lawrence),	501	20	Dark to midnight, .	Every night,	\$1.50 per month.
E. L. & Patent Flooring Co. (Amesbury),	145	20	All night,	Every night,	\$3.04 per month.
E. L. & Patent Flooring Co. (Amesbury),	50	1,200	Every dark hour until midnight, .	Every dark night, .	\$75 per year.
Fall River,	130	2,000	All night,	Every night,	47 cents per night.
Fitchburg,	100	1,200	6 hours,	Every night,	24½ cents per night.
Framingham,	56	1,200	Average 7 hours, .	Average 25 nights, .	25 cents per night.
Framingham,	134	25	Average 7 hours, .	Average 25 nights, .	5 cents per night.

Franklin (Turners' Falls),	22	2,000	Sunset to 12.30 A.M.,	Every night,	\$85.70 per year.
Gardner,	42	1,200	Dark to midnight,	Average 24 nights,	\$75 per year.
	26	25	Dark to midnight,	Average 24 nights,	\$15 per year.
Gloucester,	21	1,200	Average 5 hours,	20 nights,	\$80 per year.
	40	25	Average 5 hours,	20 nights,	\$17.50 per year.
Great Barrington,	25	1,500	6 hours,	25 nights,	25 cents per night.
	19	50	6 hours,	25 nights,	61 cents per night.
Greenfield,	37	1,200	Dark to midnight,	Moon schedule,	\$74.03 per year.
	3	32	Dark to midnight,	Moon schedule,	\$25 per year.
	7	1,200	All night,	27 nights,	45 cents per night.
Haverhill,	82	2,000	"	27 nights,	33½ cents per night.
Holyoke,	159	1,200	"	Every night,	25 cents per night.
Hudson,	13	1,200	Dark to midnight,	Every night,	{ Seven-year contract, 105 acres for \$7,000 per year. Addi- tional lights: \$70, acres; \$16, incandescents.
Hyde Park,	105	2,000	Dark to midnight,	Every dark hour,	{ 27½ cents per night. \$20 per year. \$20 per year. \$78 per year. \$16 per year. 40 cents per night up to 200, and 37½ cents for additional lights.
Lawrence,	86	2,000	6 hours,	Every night,	30 cents per night.
Lee,	54	16	Until midnight,	26 nights,	46 cents per night.
Leicester,	120	26	Dark to midnight,	Every dark night,	\$20 per year.
	54	1,200	Dark to 12.30 A.M.,	Moon schedule,	{ \$78 per year. \$16 per year.
Leominster,	47	25	Dark to 12.30 A.M.,	Moon schedule,	{ 40 cents per night up to 200, and 37½ cents for additional lights.
Lowell,	209	2,000	All night,	Every night,	30 cents per night.
	80	1,200	Until 2 A.M.,	20 nights,	46 cents per night.
Lynn,	165	2,000	All night,	Every night,	\$20 per year.
	451	25	All night,	20 nights,	27½ cents per night.
Malden,	181	1,200	Average 6 hours,	{ Every night and moon schedule,	6 cents per night.
	1,150	25			

NAME OF COMPANY.	Number of Public Lamps.	Nominal Candle-Power.	Number of hours per night.	Number of nights per month.	PRICE PAID.
Westborough,	29	1,200	Until midnight,	Every dark night, .	\$80 per year.
Westfield,	27	32	Until midnight,	Every dark night, .	\$20 per year.
Weymouth,	53	2,000	6½ hours,	Every night, . . .	22½ cents per night.
Whitman,	6	25	6½ hours,	Every night, . . .	5½ cents per night.
Winchendon,	51	1,200	Until 12 30 A.M.,	Average 25 nights,	\$70 per year.
Woburn,	384	32	Until 12 30 A.M.,	Average 25 nights,	\$22 per year.
Worcester,	27	1,200	Until midnight,	Average 20 nights,	33½ cents per night.
Winchendon,	9	32	Until midnight,	Average 20 nights,	5 cents per night.
Woburn,	10	1,200	Dark to midnight,	25 nights,	\$75 per year.
Worcester,	40	25	Dark to midnight,	25 nights,	\$15 per year.
Woburn,	32	2,000	Dark to 12.30 A.M.,	20 nights,	All lights \$250 per month.
Worcester,	90	25	" " " "	" " " "	All lights \$300 per month.
Woburn,	18	2,000	" " " "	" " " "	All lights \$586 per month.
Worcester,	188	25	" " " "	22 nights,	40 cents per night.
Woburn,	45	1,200	" " " "	22 nights,	\$1.50 per month.
Worcester,	237	25	" " " "	Every night, . . .	
Worcester,	285	2,000	Average 10½ hours,	Every night, . . .	
Worcester,	12	65	Average 10½ hours,	Every night, . . .	

The following table shows the price charged by the several electric light companies for commercial lights on June 30, 1891 : —

NAME OF COMPANY.	Price for Commercial Lights.
Adams, . . .	For 16 c. p. incandescent lights for business places open every night, \$13.00 each per year; open 6 nights per week, \$12.00; open 4 nights per week, \$9.00; wiring and renewals free.
Amherst, . . .	Incandescent lights, one cent per hour, 16 c. p. lamps by meter; dwelling house wiring at cost; commercial wiring and renewals free.
Andover, . . .	Incandescent lights, \$10 00 per year. Wiring, stores, free.
Athol, . . .	Arc lights, \$75.00 per year.
Beverly, . . .	Arc lights, 50 cents per night. Incandescent lights, 16 c. p.; 6 nights per week, \$1.00 each per month; 4 nights per week, 87½ cents each per month. Customers furnish renewals.
Blue Hill (Canton),	Incandescent lights, one cent per ampere hour. Wiring, \$2.00 and \$2.75 per light; lamp renewals, 70 cents each.
Boston, . . .	Arc lights under contracts, 1 lamp for 12 mos., 75 cents; for 6 mos., 80 cents; for 3 mos., 90 cents; 2 lamps for 12 mos., each 70 cents; for 6 mos., each 75 cents; for 3 mos., each 85 cents; 3 or 4 lamps for 12 mos., each 65 cents; for 6 mos., each 70 cents; for 3 mos., each 80 cents; 5 to 7 lamps for 12 mos., each 60 cents; for 6 mos., each 65 cents; for 3 mos., each 75 cents per day; 8 or 9 lamps for 12 mos., each 55 cents; for 6 mos., each 60 cents; for 3 mos., each 70 cents; 10 lamps for 12 mos., each 50 cents; for 6 mos., each 55 cents; for 3 mos., each 65 cents per day. Incandescent lights under contracts, 125 c. p. for 12 mos., each lamp 50 cents per day; 65 c. p. for 12 mos., 30 cents per day; 32 c. p. for 12 mos., 20 cents per day; 16 c. p., 1 cent per hour by meter. Inside incandescent wiring charged to customer at cost; lamps furnished and renewed free.
Bridgewater, . .	Arc lights, \$100.00 per year of 300 nights. Incandescent lights, 1 cent per ampere hour or \$10.00 per year for 16 c. p. lamps; wiring \$2.00 per lamp, open wiring; \$2.75 per lamp for concealed work. Lamp renewals free.
Brookline, . . .	Arc lights, \$65.00 to \$100.00 per year according to hours burnt. Incandescent lights, \$1.00 to \$1.50 per mo., 16 c. p. lamps, according to hours burnt.
Cambridge, . . .	Arc lights, 6 days per week to 10 p.m., \$100 00 per year per lamp; 7 days per week, \$120.00; 6 days per week to 12 p.m., \$120.00 per year; 7 days per week, \$140.00. Incandescent lights, 20 c. p., yearly contract, 1 lamp \$10.00, 5 lamps \$9.50, 10 lamps \$9.00, 15 lamps \$8.50, 20 lamps \$8 00 each; 32 c. p., \$24.00 to \$30.00; 65c. p., \$40.00 to \$48.00. Consumers pay cost of wiring, lamps and renewals.
Charlestown, . .	Arc lights, 50 cents per night. Incandescent lights, 50 cents per night per group of 8, 16 c. p. lamps. Wiring and lamp renewals at company's expense.
Chelsea, . . .	Arc lights, 40 cents per lamp per night until 12 p.m., 30 cents until 6 p.m. Incandescent lights, 16 c. p., \$1.25 per mo. for stores. Houses, by meter 1¼ cents per hour. Renewals 70 cents each.
Citizens' (Wakefield),	Incandescent lights, 1 cent per hour, 16 c. p. lamps by meter. \$1.00 per month by contract for 16 c. p. lamps; \$1.75 for 32 c. p. lamps. Wiring \$2.00 per lamp for open work, \$4.00 and \$5.00 for concealed work. Meter customers, first lamps free, renewals 60 cents. Contract customers, renewals free.

NAME OF COMPANY.	Price for Commercial Lights.
Clinton, . . .	Arc lights, 1 light, \$8.33 per mo.; 2 lights, \$7.50 each; 3 lights, \$7.00 each; 4 or more lights, \$6.50 each. Incandescent lights, \$1.00 per light per month, 1 cent and $1\frac{1}{4}$ cents per hour, meter rates. Wiring and renewals free.
Cohasset, . . .	Incandescent lights, rates for each customer.
Cottage City, . . .	Arc lights, \$50.00 per season of 90 days.
Dedham, . . .	Arc lights, \$70.00 per year. Incandescent lights on leases, \$10.00 per year until 10 P.M.; by meter, 20 cents per 1,000 watt hours.
Edison (Boston), . . .	Incandescent lights, 1 cent per hour, 16 c. p. lamp. Lamp renewals free; inside wiring charged to customer.
Edison (Brockton), . . .	Arc lights, 4 nights per week, each lamp \$9.00 per mo.; 7 nights, \$10.00. Incandescent lights, \$0.015 per 16 c. p. lamp hour. Discounts to large consumers. Lamp renewals free.
Edison (Fall River), . . .	Incandescent lights, $1\frac{1}{2}$ and $1\frac{1}{4}$ cents per 16 c. p. lamp hour by meter. Inside wiring at net cost; renewals free.
Edison (Lawrence), . . .	Arc lights, every night till midnight, \$10.00 per mo.; 6 nights per week, \$8.00; 3 nights per week, \$6.00. Incandescent lights, $1\frac{1}{4}$ cents per 16 c. p. lamp hour by meter. Renewals free.
Electric Light and Patent Flooring Co. (Amesbury), . . .	Arc lights, 3 nights per week, each lamp \$57.00; 4 nights, \$63.00; 5 nights, \$69.00; 6 nights, \$75.00; 7 nights, \$81.00 per year. Incandescent lights, 16 c. p. lamps, 3 nights per week, \$8.00 per year, and \$1.00 per year additional for each additional night per week; 20 c. p. lamps, 3 nights per week, \$9.00 per year, and \$1.00 per year additional for each additional night per week; 32 c. p. lamps, 3 nights per week, \$16.00 per year, and \$2.00 per year additional for each additional night per week. Wiring for stores free, for houses at owner's expense. All lamp renewals at consumers' expense.
Fall River, . . .	Arc lights, \$8.00 per mo. Incandescent lights, 20 cents per 1,000 watt hours. Renewals free.
Fitchburg, . . .	Arc lights, 1 light, \$10.00 to \$13.00 per mo.; 2 to 4 lights, \$10.00 to \$12.00 per mo.; 5 to 9 lights, \$9.00 to \$11.00 per mo.; 10 or more lights, \$8.00 to \$10.00 per mo. Incandescent lights, by meter, stores, 25 cents per 1,000 watt hours, residences, 30 cents.
Framingham, . . .	Arc lights, \$72.00 per year. Incandescent lights, by meter, 1 cent per lamp hour; by contract, \$1.25 each per month for first three lights, 12 lights for \$10 per month. Larger number by contract. Wiring in stores, \$1.50 per lamp, houses at cost. Renewals free.
Franklin (Turner's Falls), . . .	Incandescent lights, 4 nights in the week to 9 P.M., \$7.00 per year; 6 nights in the week to 11 P.M., \$10.00. Wiring and renewals free.
Gardner, . . .	Arc lights, for yearly contract, 6 nights per week, \$77.78; 5 nights, \$66.67; 4 nights, \$55.55. Incandescent lights, 25 cents per 1,000 watt hours; by contract, \$0.0122 per lamp hour. Shops, mills and factories, 50 cents per 1,000 watt hours, or by contract \$0.0225 per lamp hour. Discount of 10 per cent on all bills if paid on or before the tenth of the month. Lamp renewals free to meter customers, at cost to others.
Gloucester, . . .	Arc lights, \$8.00 to \$9.00 per mo. Incandescent lights, 16 c. p. \$0.75 to \$1.25 per lamp per month. Wiring at cost; renewals free.
Great Barrington, . . .	Arc lights, 25 cents per night. Incandescent lights, 16 c. p., \$10.00 per lamp per year. Renewals free.
Greenfield, . . .	Arc lights, 3 nights per week, \$65.00 per lamp per year. Incandescent lights, \$6.00 to \$20.00 per lamp, per year. Wiring free, lamp renewals 85 cents, 600 hours' guarantee.

NAME OF COMPANY.	Price for Commercial Lights.
Haverhill, . . .	Arc lights, 50 cents per night. Incandescent lights, \$1.25 per mo. Wiring and renewals free.
Holyoke, . . .	Arc lights, 6 nights per week, \$100.00 each per year; 4 nights, \$75.00; 3 nights, \$70.00. Incandescent lights, 1 cent per hour used, for 16 c. p. lamp. Wiring, arc, free, incandescent, at cost; renewals 50 cents each.
Hudson, . . .	Arc lights, \$6.25 per mo. Incandescent lights, by contract, 50 cents to \$1.00 per mo.; by meter, 1 cent per hour. Wiring and renewals free.
Hyde Park, . . .	Arc lights, \$70.00 per year. Incandescent lights, \$10.00 per year until 10 P.M.; 20 cents per 1,000 watt hours by meter.
Lawrence, . . .	Arc lights, 3 nights per week, \$6.00 per lamp per mo. 6 nights, \$8.00; 7 nights, \$10.00.
Lee, . . .	Incandescent lights. Stores, 20 c. p., \$9.00 per year till 10 P.M.; \$11.00 till 12 P.M.; 32 c. p., \$18.00 till 10 P.M.; \$22.00 till 12 P.M.; 65 c. p., \$38.00 till 10 P.M.; \$42.00 till 12 P.M. Ten per cent. advance for 7 days of the week. Meter rates, residences, 20 cents per 1,000 watt hours; halls and churches, 30 cents. Wiring at cost; renewals free.
Leicester, . . .	Incandescent lights, \$10.00 per lamp per year; 5 per cent. discount for all lamps when number is 5 or more. In houses, for hall light, \$7.50 per year; balance of house graduated to this. Wiring and renewals at cost.
Leominster, . . .	Arc lights, \$75.00 per year. Incandescent lights until 10 o'clock, \$10.00 per year; by meter, 20 and 30 cents per 1,000 watt hours. Wiring, \$2.50 per light for open work; \$4.50 concealed work. Renewals 75 cents each.
Lowell, . . .	Arc lights, 50 cents per lamp per night until midnight. Incandescent lights, \$1.00 per lamp per mo. Wiring, \$1.00 per light.
Lynn, . . .	Arc lights, \$7.50 to \$11.00 per lamp per mo. Incandescent lamps, \$1.00 to \$1.25 per lamp per mo.; by meter 1½ cents per lamp hour. Renewals free.
Malden, . . .	Arc lights, \$10.00 per mo. Incandescent lights, \$1.00 per mo. for 16 c. p. lamps. Lamps and renewals for commercial lights free. Private residences, first lamps free, afterwards a charge.
Marlborough, . . .	Arc lights, every night, 1 light, \$8.50 per mo.; 2 or more lights, \$7.50 each; 3 nights per week, 1 light, \$7.50 per mo.; 2 or more lights, \$5.00 each. Incandescent lights, 16 c. p., 3 nights per week until 6 P.M., \$10.00 per year; 6 nights until 9 P.M., \$12.00; until 11 P.M., \$13.50; until 12 P.M., \$15.00. Wiring and renewals free.
Middleborough, . . .	Incandescent lights, \$10.00 per lamp per year. Wiring and renewals at cost.
Milford, . . .	Arc lights, outside, April to October, \$6.67 per lamp per mo.; October to April, \$10.00. Inside use, April to October, 1 lamp 6 or 7 nights per week, \$8.00 per mo.; 2 lamps 6 or 7 nights per week, \$14.50; 3 lamps 6 or 7 nights per week, \$20.50; 4 lamps 6 or 7 nights per week, \$25.50. For 4 nights per week, 1 lamp \$6.00; 2 lamps, \$10.75; 3 lamps, \$16.00; 4 lamps, \$20.00. For 3 nights per week, 1 lamp, \$5.50; 2 lamps, \$10.00; 3 lamps, \$15.00; 4 lamps, \$18.00. From October to April, 6 or 7 nights per week, 1 lamp, \$12.00; 2 lamps, \$21.50; 3 lamps, \$30.50; 4 lamps, \$38.50. 4 nights per week, 1 lamp, \$9.75; 2 lamps, \$17.00; 3 lamps, \$24.00; 4 lamps, \$31.00. 3 nights per week, 1 lamp, \$9.50; 2 lamps, \$15.00; 3 lamps, \$22.50; 4 lamps, \$28.00. Transient lights, 75 cents per light per night. Incandescent lights by meter 1½ cents per lamp hour. On

NAME OF COMPANY.	Price for Commercial Lights.
Milford, . . .	contract, 16 c. p. lamps burning all night, \$2.50 per lamp per mo., until 11 P.M., \$1.25, until 9 P.M., \$1.00. If burnt 4 evenings per week, \$1.00 per mo.; 3 evenings, 90 cents Wiring at cost; renewals free. Factory lighting, from 4 to 6 P.M., 50 cents per lamp per mo.
Millbury, . . .	Incandescent lights, 50 cents per candle per year. Wiring, \$2.25, open; \$4.50 concealed. Renewals free.
Milton, . . .	Incandescent lights, 1 cent per hour for each 16 c. p. lamp. Wiring at cost; renewals according to contract.
Nantucket, . . .	Arc lights, 1 light, \$8.00, 2 lights, \$7.00, 3 lights, \$6.00 each per month. Incandescent lights, first three, \$1.20 per mo. each; second three, \$1.00; third three, 80 cents; fourth three, 60 cents; additional lamps, 50 cents each. Wiring and renewals free.
New Bedford, . . .	Arc lights, about 5 cents per hour, and rent of lamp at \$10.00 per year. Incandescent lights, 1 cent per 16 c. p. lamp hour. Discounts, bills \$8.00 per month and under, 5 per cent.; \$8.00 to \$16.00, 10 per cent.; \$16.00 to \$20.00, 15 per cent.; over \$20.00, 25 per cent. Wiring, by contract. Lamps and renewals, free.
Newburyport, . . .	Arc lights, 4 to 7 nights per week, 1 light, \$10.00 per mo.; 2 lights, \$9.00 each; 3 or more \$8.00 each; 1 to 3 nights per week, 1 light, \$7.00 per mo.; 2 lights, \$6.25 each; 3 or more, \$5.67 each. Series incandescent lights, 65 c. p., 4 to 7 nights per week, 1 light, \$5.00 per mo.; 2 lights \$4.75 each; 3 lights, \$4.50 each; 4 lights, \$4.25 each; 5 or more, \$4.00 each. 1 to 3 nights per week, 1 light \$3.50 per mo.; 2 lights, \$3.37½ each; 3 lights, \$3.25 each; 4 lights, \$3.12½ each; 5 lights, \$3.00 each; 6 or more, \$2.83½ each. Direct current incandescent, 20 c. p. lamp, 4 to 7 nights per week, \$1.25 each per mo.; 1 to 3 nights per week, \$1.00; 32 c. p. lamp, 4 to 7 nights, \$2.00 each per mo.; 1 to 3 nights per week, \$1.60. Discount of 5 per cent. on all bills paid before the 10th of the month.
Newton, . . .	Incandescent lights, 1 cent per hour for 16 c. p. lamp; by meter, 25 cents per 1,000 watt hours. Discount of 10 per cent. if consumption equals 100,000 feet of gas per year. Renewals at customers' expense.
North Adams, . . .	Arc lights, single lamp, 40 cents per night; 2 lamps, 36 cents each; 3 at 34 cents each; 4 at 33 cents each; 5 at 32 cents each. Incandescent lights, \$1.00 per mo. for 6 nights per week; 83½ cents per mo. for 4 nights per week. Wiring and renewals free.
Northampton, . . .	Arc lights, \$75.00 per year every night till 10 P.M.; \$100.00 till midnight; \$60.00 for one night a week till 10 P.M. Incandescent lamps, 16 c. p. used 2 nights per week until 10 P.M. and 4 nights until 6 P.M., \$8.00 each per year; 6 nights until 9 P.M., \$10.00; until 10 P.M., \$12.00; until 11 P.M., \$14.00; until midnight, \$16.00; 7 nights until 10 P.M., \$13.00; until 11 P.M., \$15.00; until midnight, \$17.00; all night, \$20.00. By meter, 1 cent a lamp hour. Wiring and lamps on meter at consumers' cost; other lamp renewals free.
North Attleborough,	Arc lights, \$8.00 per lamp per mo., 6 nights per week; \$10.00, every night. Incandescent 20 c. p. lamps, \$1.25; 25 c. p., \$1.50; 32 c. p., \$2.00; 50 c. p., \$3.00; 65 c. p., \$4.00 each per month. Renewals free.
North Shore (Revere),	Arc lights, \$80.00 per year. Summer rates, 55 cents per night per light. Incandescent lights, \$10.00 per year until 10 P.M.; by meter, 20 and 30 cents per 1,000 watt hours. Wiring, \$2.50 per lamp, open work; \$4.50, concealed work. Renewals, 80 cents each, with rebate of 5 cents for old lamps.

NAME OF COMPANY.	Price for Commercial Lights.
Orange, . . .	{ Incandescent lights, 16 c. p., 4 nights a week, \$9.00 a year; 6 or 7 nights a week, \$10.00 a year; 20 c. p., 4 nights a week, \$10.00 a year; 6 or 7 nights a week, \$12.00 a year. Wiring at cost. A charge for renewals.
Palmer, . . .	{ Arc lights, \$80.00 per year. Incandescent lights, \$10.00 per year till 10 P.M. Stores, wiring and renewals free; houses, wiring at cost, renewals 75 cents each.
Pittsfield, . . .	{ Arc lights, until 6 P.M., 3 nights per week and until 9 P.M. 3 nights, 1 lamp, \$84.00 per year, 2 or more lamps, \$72.00; same service as above from April 1st to September 1st, 1 lamp, \$25.00, 2 lamps, \$24.00; from September 1st to April 1st, 1 lamp, \$65.00, 2 lamps, \$60.00. Until 9 P.M. six nights a week, 1 lamp \$120.00 per year, 2 lamps \$108.00. Same service from April 1st to September 1st, 1 lamp \$40.00, 2 or more lamps \$36.00; September 1st to April 1st, 1 lamp \$84.00, 2 lamps, \$76.00. Incandescent lights, by meter, 250 ampere hours or less, 1 2-10 cents per hour; 250 to 500, 1 1-10 cents; 500 to 1,500, 1 cent; 1,500 to 2,500, 9-10 cents; 2,500 to 3,500, 8-10 cents; 3,500 or more, 7-10 cents.
Plymouth, . . .	{ Arc lights, 30 cents per lamp per night. Incandescent lights, 80 and 90 cents per month; by meter, 20 and 30 cents per 1,000 watt hours. Wiring and renewals at cost.
Quincy, . . .	{ Incandescent lights, \$1.00 per mo., 16 c. p. lamp. Original outfit of lamps free. Renewals for stores furnished by company; houses, by consumers.
Salem, . . .	{ Arc lights, every evening except Sunday, \$12.00 per month; 3 nights a week, \$10.00. Incandescent lights, 16 c. p., 6 evenings a week until 10.30 P.M., \$1.00 and renewals; 3 evenings, 87 cents; 1 evening, 75 cents per month. Meter rates 1 cent per hour. Special rates in many cases. Exposed wiring, free. Renewals, 60 cents each.
Somerville, . . .	{ Arc lights, \$125.00 per year for drug stores, \$80.00 for grocery stores. Incandescent lights, 1 cent per hour, 16 c. p. lamps.
Southbridge, . . .	{ Arc lights, single lamp, \$80.00 per year for drug stores, \$70.00 elsewhere; 2 lamps, 10 per cent. discount; 3, 15 per cent. discount. Incandescent lights, \$10.00 per year for one 16 c. p. lamp, \$50.00 for six. Wiring, commercial free. Domestic by contract. All renewals free.
South Hadley Falls,	{ Incandescent lights, 6 nights per week till 6.30 P.M., \$6.00 per year; till 6.30 P.M. ordinarily and till 10 P.M. 2 nights per week, \$7.20; till 6.30 P.M. ordinarily and till 10 P.M. 3 nights per week, \$7.80; till 6.30 P.M. ordinarily and till 10 P.M. 4 nights per week, \$8.40; till 9 P.M. 6 nights per week, \$8.40; till 10 P.M. 6 nights per week, \$10.00; till 11 P.M. 6 nights, \$11.00. Prices for 16 c. p. lamps. Discount of 5 per cent. on bills paid within 5 days. Wiring and lamp renewals at cost.
Spencer, . . .	{ Arc lights, 30 7-20 cents per night.
Stoughton, . . .	{ Arc lights, \$60.00 per year.
Suburban (Boston), .	{ Arc lights, one, 50 cents per night; more than one, 45 cents each. Incandescent lights, 1 cent per ampere hour. Renewals free.
Taunton, . . .	{ Arc lights, \$8.00 per mo. Incandescent lights, \$1.00 per mo.
Union (Franklin), .	{ Arc lights, single lamp, 4 nights per week till 10 P.M., \$60.00 per year; till 12 P.M., \$75.00; every night (except Sunday) till 10 P.M., \$75.00 per year; till 12 P.M., \$90.00. Incandescent lights, single lamp 16 c. p., every night till 10 P.M., \$10.00 per year; till 12 P.M., \$12.00; till day-light, \$18.00; 20 c. p. till 10 P.M., \$12.00 per year; till

NAME OF COMPANY.	Price for Commercial Lights.
Union (Franklin), .	12 P.M., \$15.00; till daylight, \$21.00. Above 20 c. p. special rates. By meter, 20 cents per 1,000 watt hours. Wiring and renewals at cost.
United (Springfield),	Arc lights, 35 cents to 70 cents per lamp per night. Incandescent lights. Rates per lamp per year for domestic lighting: 1st lamp, \$9.00; 2d, \$8.00; 3d, \$7.00; 4th, \$6.00; 5th, \$5.00; 6th, \$4.00; 7th and all others, \$3.00. Rates per lamp per year for business lighting until 6 P.M. ordinarily and 10 P.M. 1 night per week: 10 c. p. lamps, \$1.50 each; 16 c. p., \$7.00; 25 c. p., \$9.25; 50 c. p., \$17.50; 100 c. p., \$33.50; 150 c. p., \$49.00. Until 6 P.M. ordinarily and 10 P.M. 2 nights per week: 10 c. p. lamps, \$6.50 each; 16 c. p., \$8.00; 25 c. p., \$10.75; 50 c. p., \$20.00; 100 c. p., \$38.50; 150 c. p., \$56.00. Until 6 P.M. ordinarily and 10 P.M. 3 nights per week: 10 c. p. lamps, \$7.50 each; 16 c. p., \$9.00; 25 c. p., \$12.00; 50 c. p., \$22.50; 100 c. p., \$43.25; 150 c. p., \$60.00. Until 8 P.M. ordinarily and 12 P.M. 1 night per week: 10 c. p. lamps, \$8.00 each; 16 c. p., \$10.00; 25 c. p., \$13.25; 50 c. p., \$25.00; 100 c. p., \$48.00; 150 c. p., \$70.00. Until 10 P.M. every night: 10 c. p. lamps, \$9.00 each; 16 c. p., \$11.00; 25 c. p., \$14.75; 50 c. p., \$27.50; 100 c. p., \$52.75; 150 c. p., \$77.00. Until 12 P.M. every night: 10 c. p. lamps, \$10.00 each; 16 c. p., \$12.00; 25 c. p., \$16.00; 50 c. p., \$30.00; 100 c. p., \$57.50; 150 c. p., \$84.00. All night and every night: 10 c. p. lamps, \$13.00 each; 16 c. p., \$16.00; 25 c. p., \$21.25; 50 c. p., \$40.00; 100 c. p., \$76.75; 150 c. p., \$112.00. Lamps and renewals free. Interior wiring at cost.
Uxbridge and North-bridge,	Incandescent lights, 1 cent per hour, 16 c. p. lamps by meter. Wiring, \$2.00 per light open, \$3.00 concealed.
Waltham,	Arc lights, 6 or 7 nights per week till 12 P.M., 1 light, \$12.50 per mo.; 2 lights, \$11.87½; 3 lights, \$11.25; 4 lights, \$10.62½; 5 lights, \$10.00; 4 or 5 nights per week, 1 light, \$10.00; 2 lights, \$9.50; 3 lights, \$9.00; 4 lights, \$8.50; 5 lights, \$8.00 each. Discount 20 per cent. from above prices if paid on or before the 15th of the month. Incandescent lights, 20 c. p., 6 or 7 nights per week, \$1.35 per mo.; 5 nights per week, \$1.30 each; 4 nights per week, \$1.25 each. Discount 35 cents per light if paid on or before the 15th of the month. 32 c. p., 6 or 7 nights per week, 1 light, \$2.75; 2 lights, \$2.62; 3 lights, \$2.48; 4 lights, \$2.34; 5 lights, \$2.20; 4 or 5 nights per week, 1 light, \$2.50; 2 lights, \$2.38; 3 lights, \$2.25; 4 lights, \$2.12; 5 lights, \$2.00 each; 65 c. p., 6 or 7 nights per week, 1 light, \$5.00; 2 lights, \$4.75; 3 lights, \$4.50; 4 lights, \$4.25; 5 lights, \$4.00; 4 or 5 nights per week, 1 light, \$4.50; 2 lights, \$4.28; 3 lights, \$4.05; 4 lights, \$3.83; 5 lights, \$3.60 each. Discount 10 per cent. from these prices if paid on or before the 15th of the month. Inside wiring and lamp renewals at expense of consumer.
Walworth (Boston),	Arc lights, 50 cents per day. Incandescent lights, 1 cent per hour, or \$20.00 per year. Lamp renewals free.
Ware,	Arc lights, \$6.25 per mo. Incandescent lights, 6 nights per week until 10 P.M., \$1.00 per mo.; until 9 P.M., 83 cents per mo.; 3 nights per week until 10 P.M., 67 cents per mo.; by meter, 20 cents per 1,000 watt hours. Wiring and renewals at cost.
Webster,	Arc lights, \$80.00 per lamp per year. Incandescent lights, 1 light until 12 P.M., \$10.00 per year; 5 lights, 5 per cent. off; 10 lights or more, 10 per cent. off. Wiring, stores, free; houses at cost; renewals free.
Westborough, . .	Arc lights, \$80.00 per year. Incandescent lights, \$7.50 per year for 16 c. p. lamp; \$9.00 for 20 c. p. lamp. Wiring at cost; renewals 75 cents each.

NAME OF COMPANY.	Price for Commercial Lights.
Westfield, . . .	Arc lights, \$100.00 per year payable monthly. A discount of 10 per cent. is made for each week-day night on which the lamp is not burned after 6 P.M. Incandescent lights, for 16 c. p. lamp every night until 11 P.M., \$1.25 per mo.; every night except Sunday until 11 P.M., \$1.15; 5 nights until 9 P.M., 1 night until 11 P.M., \$1.00; 4 nights until 8 P.M., 2 nights until 11 P.M., 85 cents; 3 nights until 6 P.M., 2 nights until 9 P.M., 1 night until 11 P.M., 70 cents per mo.; 10 c. p. lamps, 25 per cent. less than above rates; 20 c. p. lamps, 20 per cent. more than above rates. Exposed wiring free; lamps and renewals at cost.
Weymouth, . . .	Incandescent lights, 16 c. p. lamps, 7 nights per week, \$10.00 per year; 6 nights, \$9.50; 5 nights, \$9.00; 4 nights, \$8.50. Wiring, \$3.00 per light for concealed work; renewals, 16 c. p. lamps, 65 cents each, with rebate of 5 cents for lamp bases.
Whitman, . . .	Arc lights, 4 nights per week until 10 P.M., \$60.00 per year; until midnight, \$75.00; 6 nights per week until 10 P.M., \$75.00; until midnight, \$90.00. Incandescent lights, 16 c. p., until 10 P.M., \$10.00 per lamp per year; until midnight, \$12.00; until day-light, \$18.00; 20 c. p. lamps until 10 P.M., \$12.00; until midnight, \$15.00; until day-light, \$21.00. Renewals at customers' expense.
Winchendon, . . .	Arc lights, 4 nights per week until 10 P.M., \$60.00 per year; until midnight, \$75.00; 6 nights per week until 10 P.M., \$75.00; until midnight, \$90.00. Incandescent lights, 16 c. p., until 10 P.M., \$10.00 per lamp per year; until midnight, \$12.00; until day-light, \$18.00. 20 c. p. lamps until 10 P.M., \$12.00; until midnight, \$15.00; until day-light, \$21.00; above 20 c. p., special rates. By meter for residences, 20 cents per 1,000 watt hours, in other cases 30 cents per 1,000 watt hours. Meter rental, 25 light meter, \$2.00 per year; 50 light, \$2.50; 100 light, \$4.00. Wiring at cost. Lamp renewals, 75 cents each. No contracts made for less than one year.
Woburn, . . .	Arc lights, 7 nights per week, \$9.00 per mo.; 6 nights, \$8.00; 5 nights, \$7.00; 4 or less, \$6.00. Incandescent lights, 6 or 7 nights per week, \$12.00 per year; 5 nights, \$11.00; 4 or less, \$10.00. Wiring at cost; renewals free.
Worcester, . . .	Arc lights, 1 light for 4 mos. daily, 70 cents; for 8 mos. daily, and Saturdays for 12 mos., 60 cents per night; 2 lights for 4 mos. daily, 65 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 55 cents each per night; 3 lights for 4 mos. daily, 60 cents each per night; for 8 mos. daily, and Saturdays for 12 mos., 50 cents each per night. One or more lights every night in the year, 50 cents each. Incandescent lights, 6 nights per week, until 9 P.M., \$1.00 per mo.; until 10.30 P.M., \$1.25 per mo.; until 11.30 P.M., \$1.50 per mo.; 7 nights per week, until 10.30 P.M., \$1.50 per mo.; until 12 P.M., \$1.75 per mo.; all night, \$2.00 per mo. Renewals free.

CASES PENDING BEFORE THE BOARD DEC. 31, 1891.

Appeal of the Lawrence Gas Company from the decision of the selectmen of North Andover, giving the Merrimack Valley Horse Railroad Company the right to erect poles and maintain electric lights in the streets.

Appeal of the Braintree Electric Company from the consent of the selectmen of Braintree, allowing A. S. Morrison & Brothers and others to run wires over certain streets.

Appeal of the Boston Electric Light Company and the Edison Electric Illuminating Company from the decision of the aldermen of Boston, allowing certain parties to run wires over Summer Street.

Appeal of the Marlborough Gas Light Company from the decision of the selectmen of Marlborough, giving the Citizens' Gas Company permission to lay gas pipes in the streets.

Appeal of the Randolph and Holbrook Electric Company and Edward H. Galligan and others from the decision of the selectmen of Randolph, permitting the Randolph and Holbrook Light and Power Company to erect poles in the streets.

Appeal of the Bristol County Electric Company from the decision of the aldermen of Taunton, refusing it permission to erect poles and wires in the streets.

Appeal of P. H. Alexander *et al.* from the decision of the selectmen of Peabody, refusing permission to maintain poles and wires in the streets.

Petition of the Natick Gas Light Company for authority to supply electric light.

Appeal of the Wakefield Electric Light and Power Company from the decision of the selectmen of Wakefield, refusing permission to maintain poles and wires in the streets.

Appeal of the Framingham Gas, Fuel and Power Company from the decision of the selectmen of Framingham, granting permission to the Framingham and Ashland Gas Light Company to dig up the streets for gas pipes.

Appeal of the Consumers' Gas Company from the action of the Board of Aldermen and the Board of Public Works of the city of New Bedford, refusing to allow it to dig up the streets for gas pipes.

JEREMIAH W. COVENEY.
FORREST E. BARKER.
CHARLES A. TOWNE.

APPENDICES.

APPENDIX A.

BALANCE SHEETS AND PROFIT AND LOSS ACCOUNTS, JUNE 30, 1891.

[From the returns made as corrected by the Board.]

ADAMS ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$3,585 48
Steam plant,	11,757 96
Electric plant,	6,819 96
Lines, meters, lamps and globes,	9,316 37
Incandescent installation,	912 48
Due for electric light and power,	1,071 93
Fuel on hand,	63 95
Carbons on hand,	18 00
Oil and waste on hand,	19 85
Incandescent lamps on hand,	22 50
Globes on hand,	5 25
Other electric materials on hand,	382 15
Cash on hand,	26 31

Total assets, as per books of the company,	\$34,002 19
Profit and loss balance,	2,105 23
	\$36,107 42

LIABILITIES.

Capital stock,	\$8,500 00
Notes payable,	9,875 00
Unpaid bills,	17,732 42

Total liabilities, as per books of the company,	\$36,107 42
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$1,396 34	
Balance of electric manufacturing account,	145 36	
Interest paid,	463 53	
Balance June 30, 1891,		\$2,105 23
	\$2,105 23	\$2,105 23

ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$20,005 60
Machinery and manufacturing appliances,	6,002 05
Meters,	1,350 74
Due for gas,	401 95
Gas coal on hand,	816 08
Tar on hand,	350 00
Enrichers on hand,	212 50
Gas fixtures on hand,	478 82
Sundry accounts due the company,	7,128 29
Office furniture,	300 75
Cash on hand,	658 85

Total assets, as per books of the company, \$37,705 63

LIABILITIES.

Capital stock.	\$17,300 00
Unpaid bills,	17 39

Total liabilities, as per books of the company, \$17,317 39

Profit and loss balance, 20,388 24

\$37,705 63

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$21,081 74
Balance of gas manufacturing account,		5,176 51
Dividends declared,	\$3,460 00	
Rebate to manufacturers who are stockholders,	2,410 01	
Balance June 30, 1891,	20,388 24	
	\$26,258 25	\$26,258 25

AMESBURY ELECTRIC LIGHT.

(See ELECTRIC LIGHT AND PATENT FLOORING COMPANY.)

AMESBURY AND SALISBURY GAS COMPANY.

ASSETS.

Real estate,	\$4,875 98
Machinery and manufacturing appliances,	40,255 50
Street mains,	16,250 00
Meters,	1,663 31
Due for gas,	639 90
Gas coal on hand,	1,000 00
Enrichers on hand,	240 00
Purifying materials on hand,	25 00
Office furniture,	80 00
Cash on hand,	1,815 29

Total assets, as per books of the company, \$66,844 98

LIABILITIES.

Capital stock,	\$60,000 00
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Total liabilities, as per books of the company,	\$60,000 00
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Profit and loss balance,	6,844 98
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\$66,844 98

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$5,400 42
Balance of gas manufacturing account,		3,289 36
Other items of income,		555 00
Dividends declared,	\$2,400 00	
Balance June 30, 1891,	6,844 98	
	<hr/>	<hr/>
	\$9,244 98	\$9,244 98

AMHERST GAS COMPANY.

ASSETS.

Real estate (gas),	}	\$7,978 18
Machinery and manufacturing appliances (gas),		
Street mains (gas),		6,615 77
Meters (gas),		1,448 49
Due for gas,		669 15
Coke on hand,		98 45
Enrichers on hand,		370 80
Real estate (electric),		1,298 77
Steam plant (electric),	}	31,598 32
Electric plant,		
Lines, meters, lamps and globes,		668 21
Due for electric light and power,		80 98
Fuel on hand (electric light),		86 69
Oil and waste on hand,		178 25
Other electric materials on hand,		1,102 40
Sundry accounts due the company,		686 16
Office furniture,		55 15
Cash on hand,		175 32

Total assets, as per books of the company,	\$53,111 04
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LIABILITIES.

Capital stock,	\$25,000 00
Bonds issued,	18,500 00
Unpaid bills,	935 96
Interest due but not paid,	462 50

Total liabilities, as per books of the company,	\$44,898 46
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Profit and loss balance,	8,212 58
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\$53,111 04

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$6,765 27
Balance of gas manufacturing account,		2,037 39
Balance of electric manufacturing account,		264 54
Interest paid,	\$846 14	
Other items,	8 48	
Balance June 30, 1891,	8,212 58	
	<u>\$9,067 20</u>	<u>\$9,067 20</u>

ANDOVER ELECTRIC COMPANY. (See at end.)

ARLINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,000 00
Machinery and manufacturing appliances,	35,000 00
Street mains,	34,000 00
Due for gas,	3,265 49
Gas coal on hand,	4,586 95
Cash on hand,	2,634 31
Total assets, as per books of the company,	<u>\$80,486 75</u>

LIABILITIES.

Capital stock,	\$70,000 00
Unpaid bills,	708 00
Amounts due from the company, not included above,	2,887 65
Total liabilities, as per books of the company,	<u>\$73,595 65</u>
Profit and loss balance,	6,891 10
	<u>\$80,486 75</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$6,500 73
Balance of gas manufacturing account,		5,144 16
Dividends declared,	\$4,200 00	
Construction charged off,	553 79	
Balance June 30, 1891,	6,891 10	
	<u>\$11,644 89</u>	<u>\$11,644 89</u>

ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$12,136 05
Machinery and manufacturing appliances,	24,551 84
Street mains,	10,979 00
Meters,	1,958 05
Due for gas,	1,804 62
Gas coal on hand,	3,059 10
Coke on hand,	160 00
Tar on hand,	157 89
Purifying materials on hand,	11 00
Other gas materials on hand,	359 73
Stoves on hand,	269 90
Sundry accounts due the company,	32 48
Office furniture,	131 20
Cash on hand,	702 70
Total assets, as per books of the company,	<u>\$56,313 56</u>

LIABILITIES.

Capital stock,	\$46,400 00
Unpaid bills,	8 23
<hr/>	
Total liabilities, as per books of the company,	\$46,408 23
Profit and loss balance,	9,905 33
<hr/>	
	\$56,313 56

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$6,781 67
Balance of gas manufacturing account,		7,835 66
Dividends declared,	\$4,640 00	
Depreciation,	72 00	
Balance June 30, 1891,	9,905 33	
<hr/>		<hr/>
	\$14,617 33	\$14,317 33

BAY STATE GAS COMPANY.

ASSETS.

Real estate,	}	. \$4,950,000 00
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Due for gas,		34,846 00
Gas coal on hand,		20,945 17
Coke on hand,		65 86
Tar on hand,		130 00
Enrichers on hand,		17,702 49
Purifying materials on hand,		1,755 12
Other gas materials on hand,		959 81
Gas on hand,		974 00
Works improvement,		66,147 93
Horses, wagons, etc.,		790 50
Sundry accounts due the company,		35 88
Cash on hand,		2,379 34
Notes receivable,		9,000 00
Investments,		25,000 00
		<hr/>
Total assets, as per books of the company,		\$5,130,732 10

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	4,512,000 00
Unpaid bills,	85,024 40
Amounts due from the company, not included above,	4,674 22
<hr/>	
Total liabilities, as per books of the company,	\$5,101,698 62
Profit and loss balance,	29,033 48
<hr/>	
	\$5,130,732 10

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$20,975 33
Balance of gas manufacturing account,		345,936 20
Tar,		9,471 73
Interest received,		875 00
Mains,		100,000 00
Refunded by contractor,		25,000 00
Dividends declared,	\$50,000 00	
Interest paid,	423,494 78	
Balance June 30, 1891,	29,033 48	
	<hr/>	<hr/>
	\$502,528 26	\$502,528 26

BEVERLY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$23,000 00
Machinery and manufacturing appliances (gas),	8,207 84
Street mains (gas),	14,079 50
Meters (gas),	3,706 90
Due for gas,	3,410 76
Gas coal on hand,	1,580 00
Coke on hand,	4 80
Tar on hand,	20 00
Enrichers on hand,	24 00
Purifying materials on hand,	7 00
Other gas materials on hand,	24 13
Stoves on hand,	323 00
Gas fixtures on hand,	515 82
Real estate (electric),	15,986 92
Steam plant (electric),	} 38,423 36
Electric plant,	
Lines, meters, lamps and globes,	} 930 66
Due for electric light and power,	
Fuel on hand (electric light),	17 00
Carbons on hand,	6 00
Oil and waste on hand,	40 06
Incandescent lamps on hand,	29 40
Globes on hand,	9 50
Sundry accounts due the company,	392 00
Office furniture,	382 23
Cash on hand,	844 80
Investments,	1,000 00
Total assets, as per books of the company,	<hr/> \$112,965 68

LIABILITIES.

Capital stock,	\$60,000 00
Special stock,	11,800 00
Notes payable,	19,605 00
Unpaid bills,	5,767 42
Total liabilities, as per books of the company,	<hr/> \$97,172 42
Profit and loss balance,	15,793 26
	<hr/> \$112,965 68

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$10,629 98
Balance of gas manufacturing account,		7,023 46
Balance of electric manufacturing account,		2,590 56
Interest received,		257 98
Rents,		84 00
Other items of income,		67 18
Dividends declared,	\$3,550 00	
Interest paid,	1,298 37	
Other items,	11 53	
Balance June 30, 1891,	15,793 26	
	<u>\$20,653 16</u>	<u>\$20,653 16</u>

BLUE HILL ELECTRIC COMPANY (CANTON).

ASSETS.

Real estate,	\$3,742 40
Steam plant,	5,428 33
Electric plant,	10,077 52
Lines, meters, lamps and globes,	16,754 00
Due for electric light and power,	351 81
Fuel on hand,	20 40
Horses, wagons, etc.,	300 00
Sundry accounts due the company,	108 10
Cash on hand,	13 86
Total assets, as per books of the company,	<u>\$36,796 42</u>

LIABILITIES.

Capital stock,	\$20,000 00
Bonds issued,	16,000 00
Unpaid bills,	209 25
Interest due but not paid,	480 00
Total liabilities, as per books of the company,	<u>\$36,689 25</u>
Profit and loss balance,	107 17
	<u>\$36,796 42</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of electric manufacturing account,	\$365 91	
Wiring,		\$953 08
Interest,	480 00	
Balance June 30, 1891,	107 17	
	<u>\$953 08</u>	<u>\$953 08</u>

BOSTON ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$336,786 80
Steam plant,	228,510 16
Electric plant,	299,907 00

Lines, meters, lamps and globes,	\$744,330 47
Due for electric light and power,	29,017 72
Fuel on hand,	13,549 06
Carbons on hand,	1,063 18
Oil and waste on hand,	96 61
Incandescent lamps on hand,	2,411 83
Globes on hand,	1,320 01
Other electric materials on hand,	14,598 89
Motors on hand,	1,255 90
Horses, wagons, etc.,	832 39
Sundry accounts due the company,	2,282 06
Office furniture,	1,661 83
Cash on hand,	10,120 58

Total assets, as per books of the company, \$1,687,744 49

LIABILITIES.

Capital stock,	\$1,076,000 00
Bonds issued,	300,000 00
Notes payable,	88,078 62
Unpaid bills,	28,396 39
Interest due but not paid,	6,051 25

Total liabilities, as per books of the company, \$1,498,526 26
 Profit and loss balance, 189,218 23

\$1,687,744 49

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$154,806 51
Balance of electric manufacturing account,		123,797 86
Premium on bonds sold,		720 00
Rents,		3,252 49
Other items of income,		3,799 58
Interest paid,	\$22,128 21	
Dividends declared,	62,280 00	
Paid leased companies,	12,750 00	
Balance June 30, 1891,	189,218 23	
	\$286,376 44	\$286,376 44

BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,364,121 42
Machinery and manufacturing appliances,	3,041,443 19
Street mains,	1,924,402 27
Meters,	378,833 35
Due for gas,	136,194 40
Gas coal on hand,	121,856 42
Coke on hand,	14,363 34
Tar on hand,	9,525 87
Enrichers on hand,	2,204 05
Purifying materials on hand,	699 80
Other gas materials on hand,	50,748 42

Gas on hand,	\$2,435 52
Work in process of construction, not completed,	72,293 56
Sundry accounts due the company,	172,187 52
Office furniture,	475 50
Cash on hand,	142,873 71
Notes receivable,	25,000 00
Ammonia,	574 79
Total assets, as per books of the company,	<u>\$7,460,233 13</u>

LIABILITIES.

Capital stock,	\$2,500,000 00
Notes payable,	150,000 00
Unpaid bills,	120,228 19
Deposits,	24,245 54
Reserve and contingent fund, }	
Depreciation fund, . . . }	296,730 81
Amounts due from the company, not included above,	12,708 92
Total liabilities, as per books of the company,	<u>\$3,103,913 46</u>
Profit and loss balance,	4,356,319 67
	<u>\$7,460,233 13</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$4,317,097 85
Balance of gas manufacturing account,		224,968 96
Rents,		7,466 24
Dividends declared,	\$187,500 00	
Interest paid,	5,713 38	
Balance June 30, 1891,	4,356,319 67	
	<u>\$4,549,533 05</u>	<u>\$4,549,533 05</u>

BRIDGEWATER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$2,941 97
Steam plant,	3,864 02
Electric plant,	5,289 25
Lines, meters, lamps and globes,	15,878 50
Due for electric light and power,	48 90
Fuel on hand,	25 50
Carbons on hand,	49 50
Oil and waste on hand,	71 21
Globes on hand,	7 05
Cash on hand,	150 79
Total assets, as per books of the company,	<u>\$28,326 69</u>
Profit and loss balance,	1,945 79
	<u>\$30,272 48</u>

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	9,378 29
Unpaid bills,	5,683 55
Interest accrued,	210 64
Total liabilities, as per books of the company,	<u>\$30,272 48</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,	\$1,492 00	
Balance of electric manufacturing account,		\$392 36
Error in liabilities returned June 30, 1890,	635 51	
Interest,	210 64	
Balance June 30, 1891,		1,945 79
	<u>\$2,338 15</u>	<u>\$2,338 15</u>

BROCKTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$49,000 00
Machinery and manufacturing appliances, }	109,039 14
Street mains,	
Meters,	3,021 99
Due for gas,	3,500 38
Gas coal on hand,	2,494 37
Coke on hand,	119 00
Tar on hand,	1 38
Enrichers on hand,	2 00
Purifying materials on hand,	80 00
Other gas materials on hand,	2,060 82
Stoves on hand,	721 99
Gas fixtures on hand,	74 35
Gas on hand,	27 50
Gas lamps,	2,803 40
Horses, wagons, etc.,	484 90
Sundry accounts due the company,	1,208 75
Office furniture,	164 15
Cash on hand,	1,037 50
Investments,	17,339 67
Total assets, as per books of the company,	\$193,181 29
Profit and loss balance,	32,991 67
	<u>\$226,172 96</u>

LIABILITIES.

Capital stock,	\$100,000 00
Bonds issued,	100,000 00
Notes payable,	12,000 00
Unpaid bills,	14,172 96
	<u>\$226,172 96</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,	\$20,178 87	
Balance of gas manufacturing account,		\$14,975 97
Rents,		275 00
Other items of income,		340 05
Dividends declared,	7,000 00	
Interest paid,	5,844 01	
Cancellation of lease,	15,000 00	
Depreciation,	559 81	
Balance June 30, 1891,		32,991 67
	<u>\$48,582 69</u>	<u>\$48,582 69</u>

BROOKLINE GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$194,948 83
Machinery and manufacturing appliances (gas),	7,838 66
Street mains (gas),	208,300 65
Meters (gas),	14,525 62
Due for gas,	19,593 74
Gas coal on hand,	20,229 20
Tar on hand,	860 00
Enrichers on hand,	1,071 00
Purifying materials on hand,	165 60
Other gas materials on hand,	16,673 48
New works,	42,675 98
Steam plant (electric),	18,222 67
Electric plant,	64,182 10
Lines, meters, lamps and globes,	58,325 36
Due for electric light and power,	5,415 52
Carbons on hand,	582 20
Oil and waste on hand,	85 50
Incandescent lamps on hand,	924 12
Globes on hand,	28 80
Horses, wagons, etc.,	1,206 00
Sundry accounts due the company,	572 74
Office furniture,	549 00
Cash on hand,	215,269 80
Investments,	6,000 00

Total assets, as per books of the company, \$897,746 57

LIABILITIES.

Capital stock,	\$500,000 00
Bonds issued,	350,000 00
Unpaid bills,	1,764 37
Deposits,	405 00

Total liabilities, as per books of the company, \$852,169 37

Profit and loss balance, 45,577 20

\$897,746 57

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$28,188 55
Balance of gas manufacturing account,		39,647 08
Balance of electric manufacturing account,		1,005 32
Interest received,		1,860 48
Rents,		162 00
Premium on sale of bonds and stock,		12,896 63
Dividends declared,	\$31,500 00	
Interest paid,	5,231 97	
Other items,	1,450 89	
Balance June 30, 1891,	45,577 20	
	<u>\$83,760 06</u>	<u>\$83,760 06</u>

CAMBRIDGE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$69,294 58
Steam plant,	91,597 33
Electric plant,	85,326 11

Lines, meters, lamps and globes,	\$97,690 92
Franchise,	15,000 00
Due for electric light and power,	6,575 00
Sundry accounts due the company,	16,904 43
Cash on hand,	2,669 68

Total assets, as per books of the company, \$391,697 47

LIABILITIES.

Capital stock,	\$200,000 00
Bonds issued,	140,000 00
Notes payable,	15,878 50
Unpaid bills,	16,227 49
Reserve fund,	10,000 00

Total liabilities, as per books of the company, \$382,105 99

Profit and loss balance, 9,585 48

\$391,691 47

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$6,400 63
Balance of electric manufacturing account,		36,188 53
Dividends declared,	\$12,000 00	
Interest paid,	9,506 05	
Construction charged off,	1,497 63	
Reserve fund,	10,000 00	
Balance June 30, 1891,	9,585 48	
	\$42,589 16	\$42,589 16

CAMBRIDGE GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$64,767 66
Machinery and manufacturing appliances,	} 741,742 10
Street mains,	
Meters,	
Due for gas,	35,888 74
Gas coal on hand,	22,565 18
Coke on hand,	1,350 00
Tar on hand,	1,272 00
Other gas materials on hand,	8,356 20
Lungren lamps,	4,021 50
Sundry accounts due the company,	6,248 40
Notes receivable,	39 24
Investments,	65,706 66

Total assets, as per books of the company, \$951,957 68

LIABILITIES.

Capital stock,	\$700,000 00
Deposits,	2,026 60
Cash balance,	355 01
Amounts due from the company, not included above,	85 14

Total liabilities, as per books of the company, \$702,466 75

Profit and loss balance, 249,490 93

\$951,957 68

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$222,452 28
Balance of gas manufacturing account,		95,159 23
Interest received,		1,250 28
Rents,		629 14
Dividends declared,	\$70,000 00	
Balance June 30, 1891,	249,490 93	
	<hr/>	<hr/>
	\$319,490 93	\$319,490 93

CANTON.

(See BLUE HILL ELECTRIC COMPANY.)

CHARLESTOWN GAS COMPANY.

ASSETS.

Real estate (gas),	\$511,754 56
Street mains (gas),	1,547 28
Due for gas,	16,976 21
Gas coal on hand,	3,436 80
Coke,	84 00
Tar,	707 20
Enrichers on hand,	246 16
Steam plant (electric),	21,666 12
Electric plant,	60,155 24
Water-gas plant,	20,660 00
Due for electric light and power,	2,692 24
Fuel on hand,	851 59
Electric light extension,	7,834 60
Cash on hand,	3,167 28
Investments,	15,030 00
Total assets, as per books of the company,	<hr/> \$666,809 28

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	34,500 00
Unpaid bills,	1,489 32
Deposits,	550 62
Unpaid dividends,	820 00
Suspense account,	137 71
Reserve fund,	50,590 59

Total liabilities, as per books of the company,	\$588,088 24
Profit and loss balance,	78,721 04
	<hr/>
	\$666,809 28

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$73,941 96
Balance of gas manufacturing account,		49,839 85
Balance of electric manufacturing account,		5,821 57
Rents,		144 00
Other items of income,		478 89
Dividends declared,	\$50,000 00	
Interest paid,	1,505 23	
Balance June 30, 1891,	78,721 04	
	<hr/>	<hr/>
	\$130,226 27	\$130,226 27

CHELSEA GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$170,000 00
Machinery and manufacturing appliances (gas),	130,000 00
Street mains (gas),	
Meters (gas),	
Due for gas,	9,456 27
Gas coal on hand,	4,828 82
Purifying materials on hand,	200 00
Stoves on hand,	231 53
Real estate (electric),	3,160 48
Steam plant (electric),	16,746 97
Electric plant,	29,790 48
Lines, meters, lamps and globes,	36,166 35
Due for electric light and power,	2,819 81
Carbons on hand,	180 00
Sundry accounts due the company,	461 13
Cash on hand,	5,892 74

Total assets, as per books of the company, \$409,934 58

LIABILITIES.

Capital stock,	\$300,000 00
Notes payable,	70,000 00
Deposits,	861 00
Unpaid dividends,	75 00

Total liabilities, as per books of the company, \$370,936 00
 Profit and loss balance, 38,998 58

\$409,934 58

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$53,301 56
Balance of gas manufacturing account,		21,323 09
Balance of electric manufacturing account,		8,028 95
Rents,		192 00
Other items of income,		403 40
Dividends declared,	\$18,000 00	
Interest paid,	3,228 58	
Construction charged off,	23,021 84	
Balance June 30, 1891,	38,998 58	
	\$83,249 00	\$83,249 00

CHICOPEE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$1,020 77
Steam plant,	2,414 16
Electric plant,	5,524 76
Lines, meters, lamps and globes,	4,296 99
Due for electric light and power,	304 90
Carbons on hand,	20 00
Oil and waste on hand,	5 00
Cash on hand,	224 90

Total assets, as per books of the company, \$13,811 48

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	2,300 00
Unpaid bills,	724 05
Profit and loss balance,	787 43

\$13,811 48

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$1,936 31
Balance of electric manufacturing account,		150 94
Interest paid,	\$318 00	
Depreciation,	981 82	
Balance June 30, 1891,	787 43	
	<u>\$2,087 25</u>	<u>\$2,087 25</u>

CHICOPEE GAS WORKS.

ASSETS.

Real estate,	\$20,000 00
Machinery and manufacturing appliances,	1,684 00
Street mains,	6,500 00
Meters,	2,200 00
Due for gas,	653 97
Gas coal on hand,	1,575 00
Coke on hand,	125 00
Tar on hand,	200 00
Enrichers on hand,	6 00
Purifying materials on hand,	25 00
Sundry accounts due the company,	176 82
Office furniture,	100 00
Cash on hand,	378 06
Notes receivable,	18,500 00
Investments,	10,000 00
Total assets, as per books of the company,	<u>\$62,123 85</u>

LIABILITIES.

Capital stock,	\$30,000 00
Unpaid bills,	789 48
Total liabilities, as per books of the company,	<u>\$30,789 48</u>
Profit and loss balance,	31,334 37

\$62,123 85

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$30,628 48
Balance of gas manufacturing account,		4,031 47
Interest received,		828 34
Dividends declared,	\$3,600 00	
Other items,	553 92	
Balance June 30, 1891,	31,334 37	
	<u>\$35,488 29</u>	<u>\$35,488 29</u>

CITIZENS' GAS LIGHT COMPANY (QUINCY).

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	15,000 00
Street mains,	32,245 00
Meters,	2,835 75
Due for gas,	880 00
Gas coal on hand,	2,305 50
Coke on hand,	20 00
Tar on hand,	375 00
Purifying materials on hand,	50 00
Stoves on hand,	495 00
Gas fixtures on hand,	200 00
Horses, wagons, etc.,	175 00
Office furniture,	100 00
Cash on hand,	30 02

Total assets, as per books of the company,	\$64,211 27
Profit and loss balance,	45,889 24

\$110,100 51

LIABILITIES.

Capital stock,	\$53,000 00
Notes payable,	54,350 51
Unpaid bills,	2,000 00
Interest due but not paid,	750 00

Total liabilities, as per books of the company,	\$110,100 51
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$1,035 65
Balance of gas manufacturing account,		2,911 80
Interest received,		144 00
Other items of income,		941 42
Dividends declared,	\$2,580 00	
Interest paid,	1,511 65	
Revaluations,	11,361 05	
Old liabilities not previously returned,	35,000 00	
Other items,	469 41	
Balance June 30, 1891,		45,889 24
	\$50,922 11	\$50,922 11

CITIZENS' GAS LIGHT COMPANY (WAKEFIELD).

ASSETS.

Real estate (gas),	}	\$107,146 32
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Due for gas,		3,298 73
Gas coal on hand,		2,750 00
Coke on hand,		17 50
Tar on hand,		40 70
Enrichers on hand,		46 69
Other gas materials on hand,		1,651 96
Stoves on hand,		50 86

Real estate (electric),	\$4,904 13
Steam plant (electric),	12,499 17
Electric plant,	14,650 38
Lines, meters, lamps and globes,	19,414 56
Patent rights,	5,000 00
Due for electric light and power,	206 94
Carbons on hand,	12 00
Oil and waste on hand,	12 00
Incandescent lamps on hand,	70 00
Other electric materials on hand,	293 97
Horses, wagons, etc.,	516 00
Sundry accounts due the company,	442 75
Office furniture,	74 25
Cash on hand,	5,771 15
Unexpired insurance,	51 35
Total assets, as per books of the company,	<u>\$178,921 41</u>

LIABILITIES.

Capital stock,	\$95,300 00
Bonds issued,	46,855 82
Notes payable,	28,761 15
Unpaid bills,	6,502 90
Unpaid dividends,	67 00
Interest due but not paid,	1,190 00

Total liabilities, as per books of the company,	\$178,676 87
Profit and loss balance,	244 54

\$178,921 41

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$5,713 77
Balance of gas manufacturing account,	\$1,514 98	
Balance of electric manufacturing account,	1,216 70	
Other items of income,		313 69
Interest paid,	3,051 24	
Balance June 30, 1891,	244 54	
	<u>\$6,027 46</u>	<u>\$6,027 46</u>

CLINTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$27,000 00
Street mains,	9,000 00
Meters,	500 00
Gas coal on hand,	2,399 03
Coke on hand,	147 30
Tar on hand,	400 00
Enrichers on hand,	150 75
Purifying materials on hand,	100 00
Other gas materials on hand,	736 70
Real estate (electric),	90,695 73
Fuel on hand (electric light),	1,275 47
Carbons on hand,	83 00
Other electric materials on hand,	700 00
Office furniture,	200 00
Cash on hand,	1,223 68
Total assets, as per books of the company,	<u>\$134,611 66</u>

LIABILITIES.

Capital stock,	\$60,000 00
Notes payable,	65,000 00

Total liabilities, as per books of the company,	\$125,000 00
Profit and loss balance,	9,611 66

\$134,611 66

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$8,749 68
Balance of gas manufacturing account,		3,869 56
Balance of electric manufacturing account,		1,280 96
Dividends declared,	\$1,200 00	
Interest paid,	1,800 01	
Depreciation,	1,288 53	
Balance June 30, 1891,	9,611 66	
	<u>\$13,900 20</u>	<u>\$13,900 20</u>

COHASSET ELECTRIC COMPANY.

ASSETS.

Real estate,	\$4,198 61
Steam plant,	5,864 65
Electric plant,	11,287 60
Lines, meters, lamps and globes,	11,301 03
Due for electric light and power,	181 08
Fuel on hand,	98 00
Oil and waste on hand,	46 00
Incandescent lamps on hand,	31 40
Other electric materials on hand,	78 58
Cash on hand,	343 34

Total assets, as per books of the company,	\$33,430 29
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LIABILITIES.

Capital stock,	\$30,000 00
Notes payable,	500 00
Unpaid bills,	2,860 66

Total liabilities, as per books of the company,	\$33,360 66
Profit and loss balance,	69 63

\$33,430 29

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of electric manufacturing account,		\$88 92
Other items of income,		14 75
Interest paid,	\$18 41	
Depreciation,	15 63	
Balance June 30, 1891,	69 63	
	<u>\$103 67</u>	<u>\$103 67</u>

COTTAGE CITY GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	}	
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Meters (gas),		\$21,864 25
Due for gas,		95 20
Gas coal on hand,		22 00
Enrichers on hand,		131 00
Other gas materials on hand,		244 50
Stoves on hand,		142 50
Gas fixtures on hand,		625 58
Real estate (electric),	}	
Steam plant (electric),		
Electric plant,		8,682 42
Lines, meters, lamps and globes,		
Carbons on hand,		8 00
Oil and waste on hand,		23 55
Other electric materials on hand,		52 40
Sundry accounts due the company,		193 62
Office furniture,		33 00
Cash on hand,		436 78
Total assets, as per books of the company,		<u>\$32,554 80</u>

LIABILITIES.

Capital stock,	\$25,000 00
Bonds issued,	5,730 26
* Total liabilities, as per books of the company,	<u>\$30,730 26</u>
Profit and loss balance,	1,824 54

\$32,554 80

PROFIT AND LOSS BALANCE.

	DR.	CR.
Balance June 30, 1890,		\$624 21
Balance of gas manufacturing account,		500 12
Balance of electric manufacturing account,		700 21
Balance June 30, 1891,	\$1,824 54	
	<u>\$1,824 54</u>	<u>\$1,824 54</u>

DANVERS GAS LIGHT COMPANY.

ASSETS.

Machinery and manufacturing appliances,	\$22,348 51
Meters,	380 20
Due for gas,	423 09
Gas coal on hand,	943 57
Coke on hand,	80 00
Tar on hand,	122 50
Stoves on hand,	62 97
Gas fixtures on hand,	64 38
Cash on hand,	114 50
Total assets, as per books of the company,	<u>\$24,539 72</u>

LIABILITIES.		
Capital stock,		\$20,000 00
Notes payable,		3,000 00
Unpaid bills,		90 38
Total liabilities, as per books of the company,		\$23,090 38
Profit and loss balance,		1,449 34
		<u>\$24,539 72</u>
PROFIT AND LOSS ACCOUNT.		
	Dr.	Cr.
Balance June 30, 1890,		\$293 16
Balance of gas manufacturing account,		1,726 18
Interest paid,	\$170 00	
Depreciation,	400 00	
Balance June 30, 1891,	1,449 34	
	<u>\$2,019 34</u>	<u>\$2,019 34</u>

DEDHAM ELECTRIC COMPANY.

ASSETS.		
Real estate,		\$13,416 01
Steam plant,		14,724 24
Electric plant,		19,963 73
Lines, meters, lamps and globes,		48,232 30
Due for electric light and power,		1,232 82
Fuel on hand,		212 50
Carbons on hand,		12 00
Oil and waste on hand,		35 10
Incandescent lamps on hand,		110 40
Globes on hand,		21 00
Horses, wagons, etc.,		170 00
Sundry accounts due the company,		797 36
Office furniture,		16 00
Cash on hand,		1,180 91
Investments,		366 74
Total assets, as per books of the company,		<u>\$100,491 11</u>
LIABILITIES.		
Capital stock,		\$60,000 00
Notes payable,		31,448 02
Unpaid bills,		6,995 39
Interest due but not paid,		194 96
Total liabilities, as per books of the company,		\$98,638 37
Profit and loss balance,		1,852 74
		<u>\$100,491 11</u>
PROFIT AND LOSS ACCOUNT.		
	Dr.	Cr.
Balance June 30, 1890,		\$1,089 90
Balance of electric manufacturing account,		801 79
Wiring,		2,034 23
Guarantee fund,		648 30
Dividends declared,	\$1,800 00	
Interest paid,	921 48	
Balance June 30, 1891,	1,852 74	
	<u>\$4,574 22</u>	<u>\$4,574 22</u>

DEDHAM AND HYDE PARK GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.	
Real estate,	\$7,905 33
Machinery and manufacturing appliances,	12,352 98
Street mains,	21,407 50
Meters,	1,493 70
Due for gas,	900 65
Gas coal on hand,	1,765 34
Coke on hand,	35 80
Tar on hand,	329 00
Stoves,	
Engines and gas fixtures on hand, }	2,354 34
Horses, wagons, etc.,	345 28
Office furniture,	156 70
Cash on hand,	993 96
Investments,	480 00

Total assets, as per books of the company,	\$50,520 58
Profit and loss balance,	59,076 42

\$109,597 00

LIABILITIES.	
Capital stock,	\$100,000 00
Bonds issued,	9,000 00
Unpaid bills,	597 00

Total liabilities, as per books of the company,	\$109,597 00
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$58,369 80	
Balance of gas manufacturing account,		\$595 76
Rents,		137 75
Interest paid,	563 37	
Construction charged off,	684 87	
Depreciation,	191 89	
Balance June 30, 1891,		59,076 42
	<hr/> \$59,809 93	<hr/> \$59,809 93

DORCHESTER GAS LIGHT COMPANY.

ASSETS.	
Real estate,	
Machinery and manufacturing appliances, }	\$511,703 99
Street mains,	
Meters,	12,085 86
Due for gas,	11,607 21
Coke on hand,	13 75
Tar on hand,	176 00
Enrichers on hand,	2 97
Purifying materials on hand,	298 85
Other gas materials on hand,	4,716 52
Gas fixtures on hand,	144 63
Sundry accounts due the company,	8,972 67
Cash on hand,	6,023 64
Notes receivable,	21,260 00

Total assets, as per books of the company,	\$577,006 09
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LIABILITIES.

Capital stock,	\$400,000 00
Unpaid bills,	15,236 78
Deposits,	404 00
Total liabilities, as per books of the company,	\$415,640 78
Profit and loss balance,	161,365 31
	<u>\$577,006 09</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$161,259 67
Balance of gas manufacturing account,		30,148 47
Interest received,		1,663 89
Rents,		298 28
Dividends declared,	\$32,000 00	
Balance June 30, 1891,	161,365 31	
	<u>\$193,365 31</u>	<u>\$193,365 31</u>

EAST BOSTON GAS COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		\$225,617 23
Meters,		
Due for gas,		6,032 26
Gas coal on hand,		6,794 71
Coke on hand,		214 00
Purifying materials on hand,		201 33
Other gas materials on hand,		900 00
Stoves on hand,		173 67
Gas fixtures on hand,		1,505 59
Horses, wagons, etc.,		278 50
Sundry accounts due the company,		313 88
Cash on hand,		21,236 30
Investments,		38,275 00
Total assets, as per books of the company,		<u>\$301,542 47</u>

LIABILITIES.

Capital stock,	\$220,000 00
Unpaid bills,	2,442 44
Deposits,	201 42
Total liabilities, as per books of the company,	\$222,643 86
Profit and loss balance,	78,898 61
	<u>\$301,542 47</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$74,445 70
Balance of gas manufacturing account,		25,163 70
Interest received,		2,603 00
Other items of income,		324 21
Dividends declared,	\$22,000 00	
Investments charged off,	1,638 00	
Balance June 30, 1891,	78,898 61	
	<u>\$102,536 61</u>	<u>\$102,536 61</u>

EASTHAMPTON GAS COMPANY.

ASSETS.	
Real estate (gas),	\$9,500 00
Machinery and manufacturing appliances (gas),	10,500 00
Street mains (gas),	8,000 00
Meters (gas),	500 00
Due for gas,	802 48
Gas coal on hand,	463 50
Coke on hand,	28 00
Tar on hand,	19 50
Enrichers on hand,	16 40
Purifying materials on hand,	91 00
Other gas materials on hand,	40 00
Real estate (electric),	397 28
Steam plant (electric),	630 84
Electric plant,	} 5,350 00
Lines, meters, lamps and globes (electric),	
Due for electric light and power,	515 62
Carbons on hand,	} 100 00
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	
Other electric materials on hand,	
Sundry accounts due the company,	200 00
Cash on hand,	219 86
Total assets, as per books of the company,	\$37,374 48

LIABILITIES.	
Capital stock,	\$30,000 00
Notes payable,	1,000 00
Unpaid bills,	881 93
Total liabilities, as per books of the company,	\$31,881 95
Profit and loss balance,	5,492 53
	\$37,374 48

PROFIT AND LOSS ACCOUNT.		Dr.	Cr.
Balance June 30, 1890,			\$4,665 77
Balance of gas manufacturing account,			3,609 96
Balance of electric manufacturing account,			50 34
Interest received,			173 42
Rents,			50 00
Dividends declared,	\$3,000 00		
Other items,	56 96		
Balance June 30, 1891,	5,492 53		
	\$8,549 49	\$8,549 49	

THE EDISON ELECTRIC ILLUMINATING COMPANY (BOSTON).

ASSETS.	
Real estate,	} \$1,728,607 97
Steam plant,	
Electric plant,	
Lines, meters, lamps and globes,	
Patent rights,	
Due for electric light and power,	41,398 95

Sundry accounts due the company,	\$2,697 34
Cash on hand,	189,843 76
Notes receivable,	41,698 09
Investments,	61,021 95
Total assets, as per books of the company,	\$2,065,268 06

LIABILITIES.

Capital stock,	\$1,263,500 00
Bonds issued,	703,000 00
Notes payable,	10,000 00
Unpaid bills,	11,419 07
Depreciation fund,	39,090 00
Amounts due from the company, not included above,	29,672 30
Total liabilities, as per books of the company,	\$2,056,591 37
Profit and loss balance,	8,676 69
	\$2,065,268 06

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$17,901 45	
Balance of electric manufacturing account,		\$132,758 49
Dividends declared,	63,800 00	
Interest paid,	13,255 63	
Construction charged off,	2,124 72	
To reserve fund,	27,000 00	
Balance June 30, 1891,	8,676 69	
	\$132,758 49	\$132,758 49

EDISON ELECTRIC ILLUMINATING COMPANY OF BROCKTON.

ASSETS.

Arc plant,	\$31,691 77
Real estate,	43,640 23
Steam plant,	26,642 73
Electric plant,	22,605 04
Lines, meters, lamps and globes,	57,032 39
Patent rights,	16,500 00
Carbons on hand,	61 50
Oil and waste on hand,	47 15
Incandescent lamps on hand,	558 89
Other electric materials on hand,	2,234 22
Motors on hand,	372 24
Horses, wagons, etc.,	8,772 61
Sundry accounts due the company,	8,265 82
Cash on hand,	897 06
Notes receivable,	2,261 63
Total assets, as per books of the company,	\$221,583 28

LIABILITIES.

Capital stock,	\$92,500 00
Bonds issued,	80,000 00
Notes payable,	31,511 07
Interest due but not paid,	933 34
Depreciation fund,	16,638 87
Total liabilities, as per books of the company,	\$221,583 28

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account, . . .		\$14,652 00
Dividends declared,	\$5,100 00	
Interest paid,	6,850 00	
Depreciation,	2,394 31	
To depreciation fund,	307 69	
	<u>\$14,652 00</u>	<u>\$14,652 00</u>

EDISON ELECTRIC ILLUMINATING COMPANY OF FALL RIVER.

ASSETS.

Gas fixtures on hand, }		
Real estate, . . . }		\$89,069 12
Steam plant, . . . }		
Electric plant, . . . }		
Lines, meters, lamps and globes,		6,856 90
Patent rights,		13,500 00
Due for electric light and power,		1,319 30
Incandescent lamps on hand,		2,176 47
Other electric materials on hand,		3,062 92
Motors on hand,		4,873 72
Sundry accounts due the company,		1,943 04
Cash on hand,		2,119 45
Total assets, as per books of the company,		<u>\$124,920 92</u>

LIABILITIES.

Capital stock,	\$90,000 00
Notes payable,	23,000 00
Unpaid bills,	6,173 38
Total liabilities, as per books of the company,	<u>\$119,173 38</u>
Profit and loss balance,	5,747 54
	<u>\$124,920 92</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$11,266 94
Balance of electric manufacturing account,		15,806 65
Other items of income,		50 00
Dividends declared,	\$5,680 00	
Interest paid,	823 21	
Patent rights charged off,	13,500 00	
Other items,	1,072 84	
Balance June 30, 1891,	5,747 54	
	<u>\$27,123 59</u>	<u>\$27,123 59</u>

EDISON ELECTRIC ILLUMINATING COMPANY OF LAWRENCE.

ASSETS.

Real estate, }		
Steam plant, }		\$87,442 70
Electric plant, }		
Lines, meters, lamps and globes, }		
Due for electric light and power,		5,403 42
Carbons on hand,		103 58
Oil and waste on hand,		50 16

Incandescent lamps on hand,	\$579 38
Globes on hand,	33 53
Other electric materials on hand,	1,348 02
Motors on hand,	2,693 87
Municipal plant,	20,459 37
Sundry accounts due the company,	1,321 38
Construction,	2,391 91
Cash on hand,	2,985 66
Investments,	2,882 04

Total assets, as per books of the company, \$127,695 02

LIABILITIES.

Capital stock,	\$65,000 00
Notes payable,	42,500 00
Unpaid bills,	7,623 50

Total liabilities, as per books of the company, \$115,123 50

Profit and loss balance, 12,571 52

\$127,695 02

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$2,668 42
Balance of electric manufacturing account,		683 21
Steam heating,		1,332 75
Rents,		330 00
Other items of income,		97 80
Jobbing,		7,755 13
Interest paid,	\$295 79	
Balance June 30, 1891,	12,571 52	
	\$12,867 31	\$12,867 31

ELECTRIC LIGHT AND PATENT FLOORING COMPANY (AMESBURY).

ASSETS.

Real estate,	\$11,000 00
Steam plant,	13,148 89
Electric plant,	20,978 14
Lines, meters, lamps and globes,	7,807 50
Patent rights,	4,000 00
Due for electric light and power,	1,464 63
Fuel on hand,	1,650 00
Carbons on hand,	25 00
Oil and waste on hand,	50 00
Incandescent lamps on hand,	65 00
Globes on hand,	8 18
Other electric materials on hand,	663 35
Horses, wagons, etc.,	175 00
Sundry accounts due the company,	2,448 60
Office furniture,	100 00
Cash on hand,	25 65
Notes receivable,	231 00
Other permanent works,	47,237 85

Total assets, as per books of the company, \$111,078 79

LIABILITIES.

Capital stock,	\$42,400 00
Notes payable,	63,000 00
Unpaid bills,	2,606 87
Interest due but not paid,	716 67
Total liabilities, as per books of the company,	\$108,723 54
Profit and loss balance,	2,355 25
	<u>\$111,078 79</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$2,396 37
Balance of electric manufacturing account,		412 83
Interest received,		26 77
Rent,		50 00
Rent of mill and power,		5,652 90
Other items of income,		308 75
Dividends declared,	\$1,143 00	
Interest paid,	3,268 87	
Depreciation, mill machinery,	1,900 00	
Other items,	180 50	
Balance June 30, 1891,	2,355 25	
	<u>\$8,847 62</u>	<u>\$8,847 62</u>

FALL RIVER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$22,565 12
Steam plant,	23,950 96
Electric plant,	37,994 75
Lines, meters, lamps and globes,	35,433 92
Due for electric light and power,	3,384 09
Cash on hand,	3,919 07
Total assets, as per books of the company,	<u>\$127,247 91</u>

LIABILITIES.

Capital stock,	\$120,000 00
Notes payable,	2,000 00
Unpaid bills,	1,623 33
Total liabilities, as per books of the company,	\$123,623 33
Profit and loss balance,	3,624 58
	<u>\$127,247 91</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$2,714 13
Balance of electric manufacturing account,		14,342 98
Rents,		126 97
Dividends declared,	\$5,850 00	
Interest paid,	832 53	
Depreciation,	6,300 00	
Other items,	576 97	
Balance June 30, 1891,	3,624 58	
	<u>\$17,184 08</u>	<u>\$17,184 08</u>

FALL RIVER GAS WORKS COMPANY.

ASSETS.

Real estate,	\$135,169 97
Machinery and manufacturing appliances,	68,736 79
Street mains,	95,203 39
Meters,	19,191 89
Due for gas,	3,169 39
Gas coal on hand,	2,573 58
Tar on hand,	1,523 19
Enrichers on hand,	499 77
Purifying materials on hand,	16 50
Other gas materials on hand,	5,910 38
Gas fixtures on hand,	1,090 69
Small improvements,	2,425 32
Gas engines,	678 34
Horses, wagons, etc.,	86 40
Sundry accounts due the company,	819 08
Office furniture,	403 96
Cash on hand,	20,062 09
Total assets, as per books of the company,	\$357,560 73

LIABILITIES.

Capital stock,	\$288,000 00
Unpaid bills,	12,276 48
Deposits,	162 60
Total liabilities, as per books of the company,	\$300,439 08
Profit and loss balance,	57,121 65
	\$357,560 73

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$50,341 57
Balance of gas manufacturing account,		30,606 03
Interest received,		869 83
Rents,		1,175 24
Other items of income,		48 98
Dividends declared,	\$25,920 00	
Balance June 30, 1891,	57,121 65	
	\$83,041 65	\$83,041 65

FITCHBURG GAS COMPANY.

ASSETS.

Real estate (gas),	\$8,500 00
Machinery and manufacturing appliances (gas),	17,659 87
Street mains (gas),	10,000 00
Meters (gas),	5,000 00
Due for gas,	2,101 26
Gas coal on hand,	800 00
Enrichers on hand,	280 00
Water works,	8,184 24

Real estate (electric),	\$22,705 85
Steam plant (electric),	8,000 00
Electric plant,	31,000 00
Lines, meters, lamps and globes,	41,436 07
Due for electric light and power,	378 67
Fuel on hand (electric light),	900 00
Carbons on hand,	100 00
Incandescent lamps on hand,	186 90
Globes on hand,	52 19
Other electric materials on hand,	182 52
Sundry accounts due the company,	483 05
Cash on hand,	4,364 38
Notes receivable,	2,185 00

Total assets, as per books of the company, \$167,500 00

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	66,000 00
Depreciation fund,	1,500 00

Total liabilities, as per books of the company, \$167,500 00

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of gas manufacturing account,		\$11,369 22
Balance of electric manufacturing account,		6,817 76
Interest received,		223 05
Other items of income,		814 57
Dividends declared,	\$10,000 00	
Interest paid,	2,334 92	
Electric light construction charged off,	6,889 68	
	\$19,224 60	\$19,224 60

FRAMINGHAM ELECTRIC COMPANY.

ASSETS.

Real estate,	\$12,882 82
Steam plant,	26,286 48
Electric plant,	37,892 22
Lines, meters, lamps and globes,	57,309 79
Patent rights,	3,062 35
Due for electric light and power,	1,990 44
Fuel on hand,	} 672 75
Carbons on hand,	
Oil and waste on hand,	
Incandescent lamps on hand,	
Globes on hand,	
Other electric materials on hand,	
Motors on hand,	
Electric fixtures on hand,	} 168 00
Office furniture,	

Total assets, as per books of the company, \$140,264 85

LIABILITIES.

Capital stock,	\$80,000 00
Bonds issued,	50,000 00
Notes payable,	4,466 39
Unpaid bills,	1,015 59
Amounts due from the company, not included above,	1,863 88

Total liabilities, as per books of the company,	\$137,345 86
Profit and loss balance,	2,918 99

\$140,264 85

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$1,156 48
Balance of electric manufacturing account,		5,138 92
Interest paid,	\$3,000 00	
Other items,	376 41	
Balance June 30, 1891,	2,918 99	
	<hr/> \$6,295 40	<hr/> \$6,295 40

FRAMINGHAM GAS FUEL AND POWER COMPANY.

ASSETS.

Real estate,	\$31,171 90
Machinery and manufacturing appliances,	30,789 57
Street mains,	24,756 08
Meters,	2,076 13
Due for gas,	252 51
Gas coal on hand,	230 70
Purifying materials on hand,	75 00
Other gas materials on hand,	978 61
Stoves,	2,326 80
Gas fixtures and materials on hand, }	
Tools,	695 14
Horses, wagons, etc.,	216 75
Sundry accounts due the company,	1,643 47
Office furniture,	1,039 46
Cash on hand,	44 13
Patent rights and franchises,	40,000 00

Total assets, as per books of the company,	\$136,296 25
Profit and loss balance,	16,600 29

\$152,896 54

LIABILITIES.

Capital stock,	\$75,000 00
Bonds issued,	75,000 00
Notes payable,	400 00
Unpaid bills,	546 54
Interest due but not paid,	1,950 00

Total liabilities, as per books of the company,	\$152,896 54
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,	\$11,019 35	
Balance of gas manufacturing account,	3,531 30	
Interest received,		\$60 00
Other items of income,		375 65
Interest paid,	2,250 00	
Other items,	235 29	
Balance June 30, 1891,		16,600 29
	<u>\$17,035 94</u>	<u>\$17,035 94</u>

FRANKLIN.

(See UNION ELECTRIC LIGHT COMPANY.)

FRANKLIN ELECTRIC LIGHT COMPANY (TURNER'S FALLS).

ASSETS.

Electric plant,		\$11,007 46
Due for electric light and power,		91 27
Carbons on hand,	}	60 00
Oil and waste on hand,		
Incandescent lamps on hand,		
Globes on hand,		
Other electric materials on hand,	}	6 79
Cash on hand,		
Total assets, as per books of the company,		<u>\$11,165 52</u>

LIABILITIES.

Capital stock,	\$10,000 00
Notes payable,	400 00
Total liabilities, as per books of the company,	<u>\$10,400 00</u>
Profit and loss balance,	765 52
	<u>\$11,165 52</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$305 59
Balance of electric manufacturing account,		1,017 51
Dividends declared,	\$400 00	
Interest paid,	157 58	
Balance June 30, 1891,	765 52	
	<u>\$1,323 10</u>	<u>\$1,323 10</u>

GARDNER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$10,060 29
Steam plant,	13,204 23
Electric plant,	21,210 48
Lines, meters, lamps and globes,	20,979 26

Due for electric light and power,	\$862 79
Fuel on hand,	121 80
Carbons on hand,	43 26
Oil and waste on hand,	8 87
Incandescent lamps on hand,	799 58
Other electric materials on hand,	1,116 79
Electric fixtures on hand,	207 18
Horses, wagons, etc.,	153 50
Sundry accounts due the company,	798 38
Office furniture,	78 85
Cash on hand,	659 36

Total assets, as per books of the company,	\$70,304 62
Profit and loss balance,	2,938 82

\$73,243 44

LIABILITIES.

Capital stock,	\$28,700 00
Notes payable,	43,900 00
Unpaid bills,	643 44

Total liabilities, as per books of the company,	\$73,243 44
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$2,695 27	
Balance of electric manufacturing account,		\$2,153 31
Interest paid,	1,804 33	
Other items,	592 53	
Balance June 30, 1891,		2,938 82
	<hr/> \$5,092 13	<hr/> \$5,092 13

GARDNER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$2,500 00
Machinery and manufacturing appliances,	1,500 00
Street mains,	14,200 00
Meters,	1,300 00
Due for gas,	350 11
Enrichers on hand,	250 00
Stoves on hand,	25 00
Gas fixtures on hand,	40 00
Horses, wagons, etc.,	400 00
Office furniture,	100 00
Cash on hand,	16 05

Total assets, as per books of the company,	\$20,681 16
Profit and loss balance,	41,077 10

\$61,758 26

LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	12,500 00
Notes payable,	10,350 00
Unpaid bills,	4,189 82
Amounts due from the company, not included above,	4,718 44

Total liabilities, as per books of the company,	\$61,758 26
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$3,054 73
Balance of gas manufacturing account,	\$2,247 49	
Interest paid,	1,136 17	
Revaluation of plant,	32,022 89	
Old liabilities not before returned,	8,725 28	
Balance June 30, 1891,		41,077 10
	<u>\$44,131 83</u>	<u>\$44,131 83</u>

GLOUCESTER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$4,650 00
Steam plant,	5,594 75
Electric plant,	15,193 83
Lines, meters, lamps and globes,	13,382 05
Due for electric light and power,	2,133 46
Fuel on hand,	16 45
Carbons on hand,	80 00
Oil and waste on hand,	29 85
Incandescent lamps on hand,	444 71
Globes on hand,	49 58
Sundry accounts due the company,	800 42
Office furniture and tools,	126 20
Cash on hand,	5,327 93
Notes receivable,	12,950 00
Unexpired insurance,	75 36
Total assets, as per books of the company,	<u>\$60,854 59</u>

LIABILITIES.

Capital stock,	\$38,700 00
Notes payable,	4,674 44
Unpaid bills,	8,620 44
House construction,	106 46

Total liabilities, as per books of the company,	\$52,101 34
Profit and loss balance,	8,753 25
	<u>\$60,854 59</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$1,643 42
Balance of electric manufacturing account,		4,233 36
Rents,		245 02
Interest paid,	\$368 55	
Balance June 30, 1891,	8,753 25	
	<u>\$9,121 80</u>	<u>\$9,121 80</u>

GLOUCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$40,000 00
Machinery and manufacturing appliances, } Street mains, } Meters, }	40,000 00

Due for gas,	\$4,495 93
Gas coal on hand,	1,766 40
Coke on hand,	337 37
Tar on hand,	569 50
Purifying materials on hand,	110 00
Other gas materials on hand,	2,278 20
Stoves on hand,	150 00
Gas fixtures on hand,	500 00
Sundry accounts due the company,	2,489 06
Office furniture,	150 00
Cash on hand,	3,710 93
Notes receivable,	1,331 93
Total assets, as per books of the company,	<u>\$97,889 32</u>

LIABILITIES.

Capital stock,	\$80,000 00
Unpaid bills,	374 15
Total liabilities, as per books of the company,	<u>\$80,374 15</u>
Profit and loss balance,	17,515 17

\$97,889 32

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$30,112 23
Balance of gas manufacturing account,		12,805 01
Rents,		2,244 34
Interest received,		61 72
Premium on stock sold,		14,160 00
Other items of income,		800 39
Dividends declared,	\$8,538 00	
Construction charged off,	34,108 01	
Other items,	22 51	
Balance June 30, 1891,	17,515 17	
	<u>\$60,183 69</u>	<u>\$60,183 69</u>

GREAT BARRINGTON ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$5,530 28
Electric plant,	} 21,280 57
Lines, meters, lamps and globes,	
Patent rights,	
Due for electric light and power,	760 78
Fuel on hand,	76 98
Carbons on hand,	44 50
Oil and waste on hand,	15 38
Incandescent lamps on hand,	241 65
Globes on hand,	6 80
Other electric materials on hand,	574 44
Tools,	83 10
Sundry accounts due the company,	655 58
Meters,	44 13
Cash on hand,	192 31
Investments,	1,100 00
Total assets, as per books of the company,	<u>\$30,606 50</u>

LIABILITIES.

Capital stock,	\$23,800 00
Notes payable,	4,500 00
Unpaid bills,	1,686 40
Interest due but not paid,	81 25

Total liabilities, as per books of the company,	\$30,067 65
Profit and loss balance,	538 85

\$30,606 50

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$261 98
Balance of electric manufacturing account,		525 87
Interest paid,	\$249 00	
Balance June 30, 1891,	538 85	
	<hr/>	<hr/>
	\$787 85	\$787 85

GREENFIELD ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$4,000 00
Steam plant,	10,030 07
Electric plant,	24,129 09
Construction,	522 45
Due for electric light and power,	261 61
Fuel on hand,	105 75
Oil and waste on hand,	40 00
Incandescent lamps on hand,	350 20
Other electric materials on hand,	766 53
Sundry accounts due the company,	421 44
Cash on hand,	636 08

Total assets, as per books of the company,	\$41,263 22
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LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	8,000 00
Notes payable,	2,000 00
Unpaid bills,	904 89

Total liabilities, as per books of the company,	\$40,904 89
Profit and loss balance,	358 33

\$41,263 22

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$119 42
Balance of electric manufacturing account,		611 23
Interest paid,	\$372 32	
Balance June 30, 1891,	358 33	
	<hr/>	<hr/>
	\$730 65	\$730 65

GREENFIELD GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$44,608 47
Street mains,	4,299 27
Meters,	1,513 71
Due for gas,	832 33
Gas coal on hand,	250 00
Tar on hand,	35 00
Enrichers on hand,	120 00
Purifying materials on hand,	80 10
Other gas materials on hand,	96 54
Stoves on hand,	176 87
Gas fixtures on hand, }	
Sundry accounts due the company,	188 98
Cash on hand,	36 43
Total assets, as per books of the company,	\$52,237 70
Profit and loss balance,	103 11
	<u>\$52,340 81</u>

LIABILITIES.	
Capital stock,	\$50,000 00
Notes payable,	1,500 00
Amount due from the company, not included above,	840 81
Total liabilities, as per books of the company,	<u>\$52,340 81</u>

PROFIT AND LOSS ACCOUNT.		
	Dr.	Cr.
Balance June 30, 1890,	\$1,031 70	
Balance of gas manufacturing account,		\$1,225 69
Dividends declared,	120 00	
Interest paid,	104 44	
Depreciation,	72 66	
Balance June 30, 1891,		103 11
	<u>\$1,328 80</u>	<u>\$1,328 80</u>

HAVERHILL ELECTRIC COMPANY.

ASSETS.	
Electric plant,	\$130,310 18
Due for electric light and power,	5,835 92
Globes on hand,	2,465 17
Sundry accounts due the company,	89 80
Cash on hand,	2,038 79
Total assets, as per books of the company,	<u>\$140,739 86</u>
LIABILITIES.	
Capital stock,	\$85,000 00
Notes payable,	35,500 00
Unpaid bills,	3,751 31
Total liabilities, as per books of the company,	<u>\$124,251 31</u>
Profit and loss balance,	16,488 55
	<u>\$140,739 86</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$9,913 04
Balance of electric manufacturing account,		13,813 83
Rents,		663 04
Dividends declared,	\$6,800 00	
Interest paid,	1,101 36	
Balance June 30, 1891,	16,488 55	
	<u>\$24,389 91</u>	<u>\$24,389 91</u>

HAVERHILL GAS LIGHT COMPANY.

ASSETS.

Machinery and manufacturing appliances,	\$130,330 89
Street mains,	29,621 71
Meters,	6,775 31
Due for gas,	8,224 13
Gas coal on hand,	8,259 58
Coke on hand,	315 00
Tar on hand,	3,000 00
Enrichers on hand,	216 30
Purifying materials on hand,	500 00
Lungren lamps,	3,350 42
Sundry accounts due the company,	1,808 29
Cash on hand,	5,095 35
Investments,	18,400 00
Total assets, as per books of the company,	<u>\$215,896 98</u>

LIABILITIES.

Capital stock,	\$75,000 00
Notes payable,	42,500 00
Unpaid bills,	4,514 25
Total liabilities, as per books of the company,	<u>\$122,014 25</u>
Profit and loss balance,	93,882 73
	<u>\$215,896 98</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$68,772 46
Balance of gas manufacturing account,		33,726 02
Interest received,		503 00
Dividends declared,	\$7,500 00	
Interest paid,	1,618 75	
Balance June 30, 1891,	93,882 73	
	<u>\$103,001 48</u>	<u>\$103,001 48</u>

HUDSON ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$1,365 77
Electric plant,	6,772 63
Lines, meters, lamps and globes,	8,427 20

Due for electric light and power,	\$291 18
Cash on hand,	605 81
Investments,	5,875 00
Total assets, as per books of the company,	<u>\$23,337 59</u>

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	7,000 00
Total liabilities, as per books of the company,	<u>\$22,000 00</u>
Profit and loss balance,	1,337 59
	<u>\$23,337 59</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$445 16
Balance of electric manufacturing account,		1,266 29
Oil lamps,		520 00
Interest paid,	\$373 86	
Oil lamps,	520 00	
Balance June 30, 1891,	1,337 59	
	<u>\$2,231 45</u>	<u>\$2,231 45</u>

HYDE PARK ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$13,926 73
Steam plant,	32,042 75
Electric plant,	49,952 06
Lines, meters, lamps and globes,	42,510 49
Patent rights,	20,250 50
Due for electric light and power,	2,071 50
Fuel on hand,	380 00
Carbons on hand,	20 00
Oil and waste on hand,	21 05
Incandescent lamps on hand,	321 00
Globes on hand,	17 50
Taxes paid,	341 42
Unexpired insurance,	239 60
Horses, wagons, etc.,	128 00
Sundry accounts due the company,	908 24
Office furniture,	60 30
Cash on hand,	1,163 30
Notes receivable,	745 70
Total assets, as per books of the company,	<u>\$165,100 14</u>

LIABILITIES.

Capital stock,	\$100,000 00
Bonds issued,	50,000 00
Notes payable,	4,277 96
Unpaid bills,	5,362 25
Total liabilities, as per books of the company,	<u>\$159,640 21</u>
Profit and loss balance,	5,459 93
	<u>\$165,100 14</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$3,480 56
Balance of electric manufacturing account,		4,324 68
Jobbing,		1,993 90
Dividends declared,	\$1,500 00	
Interest paid,	2,839 21	
Balance June 30, 1891,	5,459 93	
	<u>\$9,799 14</u>	<u>\$9,799 14</u>

IPSWICH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,700 00
Machinery and manufacturing appliances,	2,000 00
Street mains,	5,100 00
Meters,	1,800 00
Due for gas,	157 62
Coal on hand,	60 00
Oil on hand,	100 00

Total assets, as per books of the company,	\$12,917 62
Profit and loss balance,	13,502 44
	<u>\$26,420 06</u>

LIABILITIES.

Capital stock,	\$16,000 00
Bonds issued,	8,000 00
Notes payable,	747 82
Unpaid bills,	1,354 10
Amounts due from the company, not included above,	318 14

Total liabilities, as per books of the company,	<u>\$26,420 06</u>
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,	\$15,445 09	
Balance of gas manufacturing account,		\$1,029 87
Error in bills payable June 30, 1890,		1,229 68
Other items of income,		194 10
Interest paid,	511 00	
Balance June 30, 1891,		13,502 44
	<u>\$15,956 09</u>	<u>\$15,956 09</u>

JAMAICA PLAIN GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	\$267,293 94
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Due for gas,		8,828 61
Gas coal on hand,		9,404 50
Coke on hand,		50 00
Enrichers on hand,		240 00
Other gas materials on hand,		2,190 60
Horses, wagons, etc.,		200 00
Sundry accounts due the company,		1,711 95
Office furniture,		750 00
Cash on hand,		4,911 36
Investments,		3,134 20

Total assets, as per books of the company,	<u>\$298,715 16</u>
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LIABILITIES.

Capital stock,	\$200,000 00
Notes payable,	42,500 00
Unpaid bills,	1,985 29
Deposits,	286 40
Total liabilities, as per books of the company,	\$244,771 69
Profit and loss balance,	53,943 47
	<u>\$298,715 16</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$51,507 98
Balance of gas manufacturing account,		23,136 15
Rents,		81 00
Dividends declared,	\$18,000 00	
Interest paid,	1,948 25	
Depreciation,	363 17	
Other items,	470 24	
Balance June 30, 1891,	53,943 47	
	<u>\$74,725 13</u>	<u>\$74,725 13</u>

LAWRENCE GAS COMPANY.

ASSETS.

Real estate (gas), . . . . .	}	. . . . .	\$484,105 79
Machinery and manufacturing appliances (gas),			
Street mains (gas),			
Meters (gas),			
Due for gas,			8,009 74
Gas coal on hand,			29,496 41
Coke on hand,			512 00
Tar on hand,			1,155 00
Enrichers on hand,			1,607 24
Purifying materials on hand,			2,235 65
Other gas materials on hand,			10,329 02
Aqua ammonia,			3,075 11
Stoves on hand,			436 72
Gas fixtures on hand,			8,502 27
Unexpired insurance,			400 00
Steam plant (electric),			15,262 88
Electric plant,			27,079 55
Lines, meters, lamps and globes,			33,664 57
Rents,			175 00
Due for electric light and power,			2,147 66
Fuel on hand (electric light),			6,398 02
Carbons on hand,			66 00
Oil and waste on hand,			68 30
Globes on hand,			51 00
Other electric materials on hand,			458 72
Suspense account, new work,			8,822 71
Edison electric plant,			114,493 85
Sundry accounts due the company,			303 44
Expense,			800 00
Cash on hand,			3,935 31
Interest,			250 00

Total assets, as per books of the company,	\$763,841 96
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LIABILITIES.

Capital stock,	\$500,000 00
Bonds issued,	125,000 00
Notes payable,	75,000 00
Unpaid bills,	9,879 12
Total liabilities, as per books of the company,	\$709,879 12
Profit and loss balance,	53,962 84
	<u>\$763,841 96</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$63,075 08
Balance of gas manufacturing account,		27,903 25
Balance of electric manufacturing account,		7,196 96
Rents,		398 67
Other items of income,		520 87
Dividends declared,	\$40,000 00	
Interest paid,	4,831 99	
Other items,	300 00	
Balance June 30, 1891,	53,962 84	
	<u>\$99,394 83</u>	<u>\$99,394 83</u>

LEE ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$1,500 00
Machinery and manufacturing appliances (gas),	2,215 88
Street mains (gas),	4,000 00
Meters (gas),	685 85
Due for gas,	34 50
Gas coal on hand,	16 75
Real estate (electric),	4,500 58
Steam plant (electric),	4,488 74
Electric plant,	8,867 77
Lines, meters, lamps and globes,	14,718 70
Fuel on hand (electric light),	103 60
Oil and waste on hand,	27 20
Incandescent lamps on hand,	221 80
Other electric materials on hand,	82 18
Horses, wagons, etc.,	150 00
Sundry accounts due the company,	1,021 56
Total assets, as per books of the company,	\$42,635 11
Profit and loss balance,	229 38
	<u>\$42,864 49</u>

LIABILITIES.

Capital stock,	\$20,000 00
Bonds issued,	15,000 00
Notes payable,	1,242 52
Unpaid bills,	6,621 97
Total liabilities, as per books of the company,	<u>\$42,864 49</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$472 43
Balance of gas manufacturing account,	\$511 52	
Balance of electric manufacturing account,	42 54	
Wiring,		348 54
Interest paid,	496 29	
Balance June 30, 1891,		229 38
	<u>\$1,050 35</u>	<u>\$1,050 35</u>

LEICESTER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$4,500 00
Electric plant,	16,132 68
Due for electric light and power,	1,041 31
Fuel on hand,	15 00
Oil and waste on hand,	15 55
Tools and electric materials on hand,	113 60
Cash on hand,	17 52
Water wheel,	1,516 82
Total assets, as per books of the company,	<u>\$23,352 48</u>
Profit and loss balance,	7,473 80
	<u>\$30,826 28</u>

LIABILITIES.

Capital stock,	\$4,000 00
Notes payable,	21,209 45
Unpaid bills,	5,616 83
Total liabilities, as per books of the company,	<u>\$30,826 28</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$5,923 99	
Balance of electric manufacturing account,		\$125 66
Other items of income,		5 55
Interest paid,	881 27	
Depreciation,	799 75	
Balance June 30, 1891,		7,473 80
	<u>\$7,605 01</u>	<u>\$7,605 01</u>

LEOMINSTER ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$10,455 24
Steam plant,	9,547 33
Electric plant,	17,210 38
Lines, meters, lamps and globes,	41,957 83
Franchise,	10,000 00
Due for electric light and power,	1,121 41
Fuel on hand,	173 00
Carbons on hand,	40 00
Oil and waste on hand,	57 50
Incandescent lamps on hand,	160 20
Globes on hand,	3 50

Other electric materials on hand,	\$239 46
Horses, wagons, etc.,	59 50
Sundry accounts due the company,	340 76
Office furniture,	33 15
Cash on hand,	1,056 06
Notes receivable,	20 00
Unexpired insurance, interest and taxes,	912 76

Total assets, as per books of the company,	\$93,383 08
Profit and loss balance,	1,078 12

\$94,466 20

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	38,775 04
Unpaid bills,	5,691 16

Total liabilities, as per books of the company,	\$94,466 20
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$436 92	
Balance of electric manufacturing account,		\$82 81
Interest paid,	724 01	
Balance June 30, 1891,		1,078 12
	<hr/> \$1,160 93	<hr/> \$1,160 93

LEOMINSTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	}		\$48,054 47
Machinery and manufacturing appliances,			
Street mains,			
Meters,			1,945 53
Due for gas,			1,161 55
Enrichers on hand,			168 30
Sundry accounts due the company,			31 80
Cash on hand,			971 94
Notes receivable,			1,200 00

Total assets, as per books of the company,	\$53,533 59
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LIABILITIES.

Capital stock,	\$50,000 00
Total liabilities, as per books of the company,	\$50,000 00
Profit and loss balance,	3,533 59

\$53,533 59

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$2,029 39
Balance of gas manufacturing account,		2,431 27
Rents,		78 00
Other items of income,		52 43
Dividends declared,	\$1,000 00	
Construction charged off,	54 75	
Other items,	2 75	
Balance June 30, 1891,	3,533 59	
	<hr/> \$4,591 09	<hr/> \$4,591 09

LEXINGTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$1,514 95
Machinery and manufacturing appliances,	21,523 73
Street mains,	6,692 15
Meters,	633 87
Due for gas,	613 95
Tar on hand,	27 50
Enrichers on hand,	20 00
Cash on hand,	1,132 42
Notes receivable,	546 00
Total assets, as per books of the company,	<u>\$32,704 57</u>

LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	67 00
Unpaid bills,	244 50
Total liabilities, as per books of the company,	<u>\$20,311 50</u>
Profit and loss balance,	12,393 07
	<u>\$32,704 57</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$11,329 10
Balance of gas manufacturing account,		1,583 85
Interest received,		7 94
Rents,		10 00
Other items of income,		62 18
Dividends declared,	\$600 00	
Balance June 30, 1891,	12,393 07	
	<u>\$12,993 07</u>	<u>\$12,993 07</u>

LOWELL ELECTRIC LIGHT CORPORATION.

ASSETS.

Real estate,	\$26,954 67
Steam plant,	96,824 95
Electric plant,	108,642 48
Lines, meters, lamps and globes,	210,350 25
Inside wiring,	6,212 60
Due for electric light and power,	9,424 63
Fuel on hand,	2,295 00
Carbons on hand,	406 00
Oil and waste on hand,	260 00
Incandescent lamps on hand,	265 50
Globes on hand,	53 75
Other electric materials on hand,	5,966 78
Horses, wagons, etc.,	485 00
Cash on hand,	1,372 24
Notes receivable,	17,488 00
Total assets, as per books of the company,	<u>\$487,001 85</u>

LIABILITIES.

Capital stock,	\$274,600 00
Notes payable,	140,090 23
Unpaid bills,	48,552 65
Total liabilities, as per books of the company,	\$463,242 88
Profit and loss balance,	23,758 97
	<u>\$487,001 85</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$35,346 98
Balance of electric manufacturing account,		13,691 19
Omitted from assets June 30, 1890,		6,653 82
Other items of income,		385 00
Dividends declared,	\$16,878 00	
Interest paid,	5,228 49	
Omitted from liabilities June 30, 1890,	10,211 53	
Balance June 30, 1891,	23,758 97	
	<u>\$56,076 99</u>	<u>\$56,076 99</u>

LOWELL GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		\$425,000 00
Meters,		
Due for gas,		2,247 65
Gas coal on hand,		31,913 69
Coke on hand,		917 00
Tar on hand,		2,500 00
Enrichers on hand,		153 80
Purifying materials on hand,		90 00
Stoves on hand,		13,250 00
Cash on hand,		6,730 36
Investments,		75,000 00
Total assets, as per books of the company,		<u>\$557,802 50</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	30,000 00
Total liabilities, as per books of the company,	\$530,000 00
Profit and loss balance,	27,802 50
	<u>\$557,802 50</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$48,801 72
Balance of gas manufacturing account,		83,842 08
Rents,		3,496 96
Dividends declared,	\$60,000 00	
Interest paid,	2,053 55	
Construction charged off,	27,832 23	
Depreciation,	18,452 48	
Balance June 30, 1891,	27,802 50	
	<u>\$136,140 76</u>	<u>\$136,140 76</u>

LYNN GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$180,000 00	
Machinery and manufacturing appliances (gas),	}	120,000 00
Street mains (gas),		
Meters,		
Due for gas,		17,133 24
Gas coal on hand,		10,310 87
Coke on hand,		160 00
Tar on hand,		500 00
Stoves on hand,		109 91
Real estate (electric),		24,122 79
Steam plant (electric),		40,701 71
Electric plant,		50,085 18
Lines, meters, lamps and globes,		77,739 36
Patent rights,		15,000 00
Due for electric light and power,		11,187 63
Carbons on hand,		279 00
Incandescent lamps on hand,		184 00
Sundry accounts due the company,		1,279 95
Cash on hand,		1,020 62
New construction,		6,147 21

Total assets, as per books of the company, \$555,961 47

LIABILITIES.

Capital stock,	\$375,000 00
Notes payable,	103,500 00
Unpaid bills,	19,150 10
Deposits,	80 66
Unpaid dividends,	625 00

Total liabilities, as per books of the company, \$498,355 76

Profit and loss balance, 57,605 71

\$555,961 47

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$59,172 18
Balance of gas manufacturing account,		40,626 99
Balance of electric manufacturing account,		39,430 71
Rents,		1,557 00
Dividends declared,	\$33,750 00	
Interest paid,	4,662 86	
Gas construction charged off,	24,768 31	
Electric construction charged off,	10,000 00	
Electric depreciation,	10,000 00	
Balance June 30, 1891,	57,605 71	
	\$140,786 88	\$140,786 88

MALDEN ELECTRIC COMPANY.

ASSETS.	
Real estate,	\$10,500 00
Steam plant,	} 218,268 37
Electric plant,	
Lines, meters, lamps, globes and construction supplies,	
Patent rights,	55,000 00
Due for electric light and power,	7,106 60
Fuel on hand,	82 50
Carbons on hand,	171 00
Oil and waste on hand,	72 98
Incandescent lamps on hand,	150 00
Other electric materials on hand,	66 00
Horses, wagons, etc.,	1,200 00
Sundry accounts due the company,	2,477 63
Office furniture,	190 00
Cash on hand,	2,496 17
Investments,	5,500 00
Total assets, as per books of the company,	\$303,281 25

LIABILITIES.	
Capital stock,	\$145,100 00
Bonds issued,	100,000 00
Notes payable,	36,099 17
Unpaid bills,	2,655 23
Total liabilities, as per books of the company,	\$283,854 40
Profit and loss balance,	19,426 85
	\$303,281 25

PROFIT AND LOSS ACCOUNT.		DR.	CR.
Balance June 30, 1890,			\$11,513 99
Balance of electric manufacturing account,			24,602 86
Dividends declared,	\$10,690 00		
Interest paid,	6,000 00		
Balance June 30, 1891,	19,426 85		
	\$36,116 85		\$36,116 85

MALDEN AND MELROSE GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$242,612 70
Street mains,	3,264 79
Due for gas,	13,944 68
Gas coal on hand,	7,031 98
Coke on hand,	90 00
Tar on hand,	1,800 00
Purifying materials on hand,	96 25
Other gas materials on hand,	28,026 04
Stoves on hand,	3,153 73
Sundry accounts due the company,	4,174 37
Cash on hand,	172 04
Total assets, as per books of the company,	\$304,366 58

LIABILITIES.

Capital stock,	\$220,000 00
Notes payable,	7,753 41
Unpaid bills,	104 90
Unpaid dividends,	1,007 50
Contingent fund,	12,625 00
Sundry accounts,	1,084 66

Total liabilities, as per books of the company,	\$242,575 47
Profit and loss balance,	61,791 11
	<u>\$304,366 58</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$51,687 76
Balance of gas manufacturing account,		29,084 99
Interest received,		413 96
Other items of income,		188 60
Dividends declared,	\$17,600 00	
Interest paid,	238 19	
Other items,	1,746 01	
Balance June 30, 1891,	61,791 11	
	<u>\$81,375 31</u>	<u>\$81,375 31</u>

MANUFACTURERS' GAS LIGHT COMPANY (FALL RIVER).

ASSETS.

Real estate,	}		
Machinery and manufacturing appliances,			
Street mains,			
Meters,			
Due for gas,			955 48
Gas coal on hand,			900 00
Coke on hand,			100 00
Tar on hand,			51 00
Enrichers on hand,			320 00
Cash on hand,			2,297 90
Total assets, as per books of the company,			<u>\$54,429 37</u>

LIABILITIES.

Capital stock,	\$50,000 00
Total liabilities, as per books of the company,	\$50,000 00
Profit and loss balance,	4,429 37
	<u>\$54,429 37</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$2,732 89
Balance of gas manufacturing account,		6,724 83
Rents,		51 65
Dividends declared,	\$5,000 00	
Depreciation,	80 00	
Balance June 30, 1891,	4,429 37	
	<u>\$9,509 37</u>	<u>\$9,509 37</u>

MARBLEHEAD GAS AND ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$5,652 41
Machinery and manufacturing appliances,	18,642 94
Street mains,	10,500 00
Meters,	1,607 25
Due for gas,	1,261 14
Gas coal on hand,	1,615 34
Coke on hand,	60 00
Tar on hand,	20 00
Other gas materials on hand,	214 91
Stoves on hand,	100 06
Office furniture,	200 00
Cash on hand,	83 26
Investments,	100 00

Total assets, as per books of the company,	\$40,057 31
Profit and loss balance,	8,061 79
	<u>\$48,119 10</u>

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	6,200 00
Unpaid bills,	1,919 10
Total liabilities, as per books of the company,	<u>\$48,119 10</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$8,698 97	
Balance of gas manufacturing account,		\$610 93
Rents,		261 25
Interest paid,	235 00	
Balance June 30, 1891,		8,061 79
	<u>\$8,933 97</u>	<u>\$8,933 97</u>

MARLBOROUGH ELECTRIC COMPANY.

ASSETS.

Real estate,	\$4,682 13
Steam plant,	10,062 40
Electric plant,	28,895 24
Lines, meters, lamps and globes,	19,747 36
Due for electric light and power,	698 47
Fuel on hand,	179 00
Carbons on hand,	54 00
Oil and waste on hand,	38 25
Incandescent lamps on hand,	98 23
Globes on hand,	32 08
Cash on hand,	748 39

Total assets, as per books of the company,	<u>\$65,235 55</u>
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LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	22,000 00
Notes payable,	5,500 00
Unpaid bills,	1,343 92

Total liabilities, as per books of the company,	\$58,843 92
Profit and loss balance,	6,391 63
	<u>\$65,235 55</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$3,733 59
Balance of electric manufacturing account,		5,063 86
Dividends declared,	\$900 00	
Interest paid,	1,505 82	
Balance June 30, 1891,	6,391 63	
	<u>\$8,797 45</u>	<u>\$8,797 45</u>

MARLBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$5,590 00
Machinery and manufacturing appliances,	53,507 51
Street mains,	7,702 98
Meters,	1,247 23
Due for gas,	1,142 87
Gas coal on hand,	3,243 81
Purifying materials on hand,	30 96
Other gas materials on hand,	194 03
Stoves on hand,	1,627 61
Gas fixtures on hand, }	314 20
Sundry accounts due the company,	2,252 12
Cash on hand,	

Total assets, as per books of the company, \$76,853 32

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	20 15
Unpaid bills,	978 21

Total liabilities, as per books of the company,	\$50,998 36
Profit and loss balance,	25,854 96
	<u>\$76,853 32</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$24,516 66
Balance of gas manufacturing account,		1,324 81
Other items of income,		48 38
Sundry items,	\$34 89	
Balance June 30, 1891,	25,854 96	
	<u>\$25,889 85</u>	<u>\$25,889 85</u>

MIDDLEBOROUGH GAS AND ELECTRIC COMPANY.

ASSETS.	
Real estate (gas),	\$11,000 00
Machinery and manufacturing appliances (gas),	14,717 02
Street mains (gas),	8,023 55
Meters (gas),	3,247 74
Due for gas,	8 44
Other gas materials on hand,	113 70
Stoves on hand,	39 20
Real estate (electric) and water power,	16,875 71
Steam plant (electric),	51,669 29
Electric plant,	26,360 58
Lines, meters, lamps and globes,	28,729 85
Franchise,	4,530 52
Due for electric light and power,	9 00
Carbons on hand,	77 50
Oil and waste on hand,	21 80
Incandescent lamps on hand,	575 00
Globes on hand,	5 25
Sundry accounts due the company,	1,528 95
Office furniture,	16 75
Cash on hand,	131 10
Tools,	68 36
Total assets, as per books of the company,	\$167,749 31
Profit and loss balance,	9,947 32
	<u>\$177,696 63</u>

LIABILITIES.	
Capital stock,	\$80,000 00
Bonds issued,	80,000 00
Unpaid bills,	16,096 63
Interest due but not paid,	1,600 00
Total liabilities, as per books of the company,	<u>\$177,696 63</u>

PROFIT AND LOSS ACCOUNT.		DR.	CR.
Balance June 30, 1890,		\$4,040 36	
Balance of gas manufacturing account,		121 56	
Balance of electric manufacturing account,		1,754 99	
Interest received,		4,050 00	
Sundry items,			\$19 59
Balance June 30, 1891,			9,947 32
		<u>\$9,966 91</u>	<u>\$9,966 91</u>

MILFORD ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.	
Real estate,	} \$52,327 67
Steam plant,	
Electric plant,	
Lines, meters, lamps and globe,	
Due for electric light and power,	1,795 64
Fuel on hand,	485 98
Carbons on hand,	35 70

Oil and waste on hand,	\$26 75
Incandescent lamps on hand, }	291 01
Globes on hand,	
Tools,	1,002 73
Sundry accounts due the company,	475 13
Cash on hand,	298 72
Unexpired insurance,	303 11
Total assets, as per books of the company,	<u>\$57,042 44</u>

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	14,500 00
Unpaid bills,	1,338 39
Reserve fund,	219 89
Total liabilities, as per books of the company,	<u>\$56,058 28</u>
Profit and loss balance,	984 16
	<u>\$57,042 44</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$1,019 89
Balance of electric manufacturing account,		1,275 58
Other items of income,	\$143 46	
Dividends declared,	800 00	
Interest paid,	434 88	
Reserve fund,	219 89	
Balance June 30, 1891,	984 16	
	<u>\$2,438 93</u>	<u>\$2,438 93</u>

MILFORD GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,450 00
Machinery and manufacturing appliances,	64,366 61
Street mains,	31,596 74
Meters,	2,500 00
Due for gas,	1,356 52
Gas coal on hand,	3,794 94
Coke on hand,	195 00
Tar on hand,	668 50
Purifying materials on hand,	58 00
Other gas materials on hand,	408 75
Stoves on hand,	168 76
Gas fixtures on hand,	1,500 00
Sundry accounts due the company,	124 34
Office furniture,	50 00
Cash on hand,	3,049 39
Total assets, as per books of the company,	<u>\$113,287 55</u>

LIABILITIES.

Capital stock,	\$72,300 00
Unpaid bills,	58 43
Unpaid dividends,	3,615 00
Depreciation fund,	35,800 00
Total liabilities, as per books of the company,	<u>\$111,773 43</u>
Profit and loss balance,	1,514 12
	<u>\$113,287 55</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$7,877 79
Balance of gas manufacturing account,		8,476 24
Dividends declared,	\$7,230 00	
Depreciation,	5,609 91	
To depreciation fund,	2,000 00	
Balance June 30, 1891,	1,514 12	
	<u>\$16,354 03</u>	<u>\$16,354 03</u>

MILLBURY ELECTRIC COMPANY.

ASSETS.

Real estate,	\$4,511 99
Steam plant,	6,293 45
Electric plant,	5,100 00
Lines, meters, lamps and globes,	14,632 79
Due for electric light and power,	1,004 98
Fuel on hand,	746 20
Other electric materials on hand,	163 05
Electric fixtures on hand,	662 90
Cash on hand,	425 52
Tools,	103 00
Total assets, as per books of the company,	<u>\$33,643 88</u>

LIABILITIES.

Capital stock,	\$15,000 00
Notes payable,	16,000 00
Unpaid bills,	1,604 01
Reserve fund,	833 55
Total liabilities, as per books of the company,	<u>\$33,437 56</u>
Profit and loss balance,	206 32
	<u>\$33,643 88</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$367 32
Balance of electric manufacturing account,		1,166 32
Interest paid,	\$960 00	
Other items,	367 32	
Balance June 30, 1891,	206 32	
	<u>\$1,533 64</u>	<u>\$1,533 64</u>

MILTON LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$5,811 70
Steam plant,	8,258 08
Electric plant,	9,135 44
Lines, meters, lamps and globes,	19,707 54
Fuel on hand,	25 00

Oil and waste on hand,	\$90 00
Cash on hand,	24 14
<hr/>	
Total assets, as per books of the company,	\$43,051 90
Profit and loss balance,	456 75
<hr/>	
	\$43,508 65

LIABILITIES.

Notes payable,	\$500 00
Unpaid bills,	31,320 88
Deposits,	11,687 77
<hr/>	
Total liabilities, as per books of the company,	\$43,508 65

NANTUCKET GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$3,000 00
Machinery and manufacturing appliances,	20,000 00
Street mains,	9,540 53
Meters,	4,000 00
Due for gas,	322 84
Gas coal on hand,	1,881 76
Coke on hand,	20 00
Tar on hand,	16 00
Purifying materials on hand,	9 00
Cash on hand,	133 35
Notes receivable,	2,000 00
Investments,	368 00
<hr/>	
Total assets, as per books of the company,	\$40,791 48

LIABILITIES.

Capital stock,	\$36,000 00
<hr/>	
Total liabilities, as per books of the company,	\$36,000 00
Profit and loss balance,	4,791 48
<hr/>	
	\$40,791 48

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$5,572 90
Balance of gas manufacturing account,		485 84
Interest received,		139 37
Other items of income,		33 37
Dividends declared,	\$1,440 00	
Balance June 30, 1891,	4,791 48	
<hr/>		<hr/>
	\$6,231 48	\$6,231 48

NATICK ELECTRIC COMPANY.

ASSETS.	
Real estate,	\$24,847 73
Steam plant,	30,365 17
Electric plant,	23,593 03
Lines, meters, lamps and globes,	82,415 53
Wiring,	10,942 19
Due for electric light and power,	1,672 10
Electric materials on hand,	1,004 82
Cash on hand,	253 75
Total assets, as per books of the company,	\$175,094 32
Profit and loss balance,	5,170 33
	<hr/> \$180,264 65
LIABILITIES.	
Capital stock,	\$40,000 00
Bonds issued,	35,000 00
Notes payable,	49,837 00
Unpaid bills,	55,427 65
Total liabilities, as per books of the company,	\$180,264 65

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$2,898 51	
Balance of electric manufacturing account,		\$2,141 76
Interest paid,	4,413 58	
Balance June 30, 1891,		5,170 33
	<hr/> \$7,312 09	<hr/> \$7,312 09

NATICK GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$16,670 38
Machinery and manufacturing appliances, }	22,554 59
Street mains,	
Meters,	
Due for gas,	1,238 25
Gas coal on hand,	143 93
Tar on hand,	230 75
Stoves on hand,	827 33
Gas fixtures on hand,	320 50
Cash on hand,	315 76
Total assets, as per books of the company,	<hr/> \$42,301 49
LIABILITIES.	
Capital stock,	\$20,000 00
Bonds issued,	8,500 00
Unpaid bills,	255 22
Total liabilities, as per books of the company,	<hr/> \$28,755 22
Profit and loss balance,	13,546 27
	<hr/> \$42,301 49

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$13,017 10
Balance of gas manufacturing account,		1,000 67
Interest paid,	\$471 50	
Balance June 30, 1891,	13,546 27	
	<hr/> \$14,017 77	<hr/> \$14,017 77

NEW BEDFORD GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$164,195 73
Machinery and manufacturing appliances (gas),	6,561 87
Street mains and services (gas),	135,968 85
Meters (gas),	17,474 73
Due for gas,	4,535 83
Gas coal on hand,	2,796 23
Coke on hand,	1,125 00
Tar on hand,	72 50
Enrichers on hand,	1 20
Purifying materials on hand,	555 50
Other gas materials on hand,	2,937 11
Stoves on hand,	8,988 26
Gas and electric fixtures on hand,	3,536 72
Real estate (electric),	57,763 85
Steam plant (electric),	68,654 38
Electric plant,	212,077 09
Lines, meters, lamps and globes, }	
Patent rights,	17,000 00
Due for electric light and power,	6,837 96
Fuel on hand (electric light),	2,842 99
Carbons on hand,	1,478 03
Oil and waste on hand,	193 05
Incandescent lamps on hand,	904 73
Globes on hand,	120 47
Other electric materials on hand,	15,275 31
Motors on hand,	11,535 00
Horses, wagons, etc.,	713 25
Sundry accounts due the company,	17,178 24
Office furniture,	1,585 25
Cash on hand,	1,010 47
Notes receivable,	545 29
Tools and supplies,	7,284 00

Total assets, as per books of the company, \$771,768 89

LIABILITIES.

Capital stock,	\$559,000 00
Notes payable,	165,300 00
Unpaid bills,	9,704 53
Deposits,	166 00
Interest due but not paid,	942 33
Insurance fund,	2,214 80
Depreciation fund,	29,953 78

Total liabilities, as per books of the company, \$758,281 44

Profit and loss balance, 13,487 45

\$771,768 89

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$17,322 72
Balance of gas manufacturing account,		25,753 45
Balance of electric manufacturing account,		19,554 00
Jobbing and fixture accounts,		2,948 20

Rents,		\$342 05
Other items of income,		171 84
Dividends declared,	\$38,500 00	
Interest paid,	8,436 01	
Wiring account,	1,268 26	
Depreciation,	1,119 81	
Other items,	644 99	
Reduction of construction account for error,	2,635 74	
Balance June 30, 1891,	13,487 45	
	<u>\$66,092 20</u>	<u>\$66,092 20</u>

NEWBURYPORT GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$1,132 43
Machinery and manufacturing appliances (gas),	75,000 00
Street mains (gas),	5,169 37
Meters (gas),	1,702 71
Due for gas,	3,171 55
Gas coal on hand,	3,147 45
Coke on hand,	150 00
Tar on hand,	212 50
Enrichers on hand,	151 00
Purifying materials on hand, }	92 36
Other gas materials on hand,	418 42
Well,	294 42
Gas fixtures on hand,	60,000 00
Real estate (electric), }	
Steam plant (electric), }	
Electric plant,	
Lines, meters, lamps and globes,	12,465 46
Power plant,	730 03
Due for electric light and power,	2,297 01
Fuel on hand (electric light),	135 30
Carbons on hand,	60 00
Oil and waste on hand,	16 25
Incandescent lamps on hand,	90 00
Globes on hand,	56 00
Motors on hand,	1,060 25
Electric fixtures on hand,	415 00
Wagons, tools and apparatus,	482 00
Sundry accounts due the company,	1,334 05
Office furniture,	46 22
Cash on hand,	1,747 76
Total assets, as per books of the company,	<u>\$171,577 54</u>

LIABILITIES.

Capital stock,	\$140,000 00
Notes payable,	16,000 00
Unpaid bills,	358 03
Unpaid dividends,	549 50
Total liabilities, as per books of the company,	<u>\$156,907 53</u>
Profit and loss balance,	14,670 01
	<u>\$171,577 54</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$10,882 15
Balance of gas manufacturing account,		6,293 30
Balance of electric manufacturing account,		6,928 50
Bad debts collected,		39 12
Rents,		200 00
Dividends declared,	\$8,400 00	
Interest paid,	1,004 25	
Bad debts,	268 81	
Balance June 30, 1891,	14,670 01	
	<hr/>	<hr/>
	\$21,343 07	\$21,343 07

NEWTON AND WATERTOWN GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$73,000 00
Machinery and manufacturing appliances (gas),	93,255 54
Street mains (gas),	165,973 36
Meters (gas),	15,584 08
Due for gas,	20,769 25
Gas coal on hand,	10,033 17
Coke on hand,	330 00
Tar on hand,	2,100 00
Purifying materials on hand,	60 00
Other gas materials on hand,	1,350 00
Stoves on hand,	455 17
Gas fixtures on hand,	1,500 00
Real estate (electric),	20,139 36
Steam plant (electric),	27,057 20
Electric plant,	25,257 61
Lines, meters, lamps and globes,	74,885 56
Due for electric light and power,	3,644 50
Fuel on hand (electric light),	74 25
Carbons on hand,	65 00
Oil and waste on hand,	13 50
Incandescent lamps on hand,	573 56
Other electric materials on hand,	2,155 67
Horses, wagons, etc.,	318 00
Sundry accounts due the company,	4,558 18
Office furniture,	447 65
Cash on hand,	1,595 90
Notes receivable,	234 39
Investments,	10,395 27
Total assets, as per books of the company,	<hr/> \$555,826 17

LIABILITIES.

Capital stock,	\$200,000 00
Bonds issued,	100,000 00
Notes payable,	61,000 00
Unpaid bills,	12,066 02
Deposits,	60 00
Unpaid dividends,	928 00
Contingent account,	25,000 00
Total liabilities, as per books of the company,	<hr/> \$399,054 02
Profit and loss balance,	156,772 15
	<hr/> \$555,826 17

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$128,070 67
Balance of gas manufacturing account,		39,536 86
Balance of electric manufacturing account,		10,957 50
Rents,		1,520 00
Dividends declared,	\$16,000 00	
Interest paid,	5,777 73	
Other items,	1,535 15	
Balance June 30, 1891,	156,772 15	
	<u>\$180,085 03</u>	<u>\$180,085 03</u>

NORTH ADAMS GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	}		
Machinery and manufacturing appliances (gas),			
Street mains (gas),			\$60,000 00
Meters (gas),			4,486 80
Due for gas,			2,145 12
Gas coal on hand,			687 00
Enrichers on hand,			200 00
Other gas materials on hand,			50 00
Stoves on hand,	}		
Gas fixtures on hand,			
Real estate (electric),			5,700 00
Steam plant (electric),			10,000 00
Electric plant,			7,300 00
Lines, meters, lamps and globes,			17,000 00
Due for electric light and power,			793 22
Carbons on hand,			102 00
Incandescent lamps on hand,			375 00
Globes on hand,			75 00
Other electric materials on hand,			1,000 00
Horses, wagons, etc.,			753 50
Sundry accounts due the company,			2,449 66
Office furniture,			885 00
Cash on hand,			368 90
Notes receivable,			4,159 26
Investments,			7,500 00
Total assets, as per books of the company,			<u>\$127,735 19</u>

LIABILITIES.

Capital stock,	\$50,000 00
Notes payable,	45,800 00
Total liabilities, as per books of the company,	<u>\$95,800 00</u>
Profit and loss balance,	31,935 19
	<u>\$127,735 19</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$25,800 25
Balance of gas manufacturing account,		4,918 39
Balance of electric manufacturing account,		5,536 98
Dividends declared,	\$3,000 00	
Interest paid,	1,320 43	
Balance June 30, 1891,	31,935 19	
	<u>\$36,255 62</u>	<u>\$36,255 62</u>

NORTHAMPTON ELECTRIC LIGHTING COMPANY.

ASSETS.	
Real estate,	\$14,108 43
Steam plant, . }	
Electric plant, }	38,208 39
Lines, lamps and globes,	29,041 88
Meters,	999 27
Unexpired insurance,	100 00
Horses, wagons, etc.,	285 20
Sundry accounts due the company,	1,244 22
Office furniture and tools,	182 18
Cash on hand,	990 25
Total assets, as per books of the company,	\$85,159 82

LIABILITIES.	
Capital stock,	\$58,700 00
Bonds issued,	7,000 00
Notes payable,	15,951 82
Unpaid bills,	819 19
Total liabilities, as per books of the company,	\$82,471 01
Profit and loss balance,	2,688 81
	\$85,159 82

PROFIT AND LOSS ACCOUNT.		DR.	CR.
Balance June 30, 1890,			\$2,538 75
Balance of electric manufacturing account,			4,196 60
Rents,			336 50
Other items of income,			30 91
Dividends declared,	\$2,935 00		
Interest paid,	1,478 95		
Balance June 30, 1891,	2,688 81		
	\$7,102 76	\$7,102 76	

NORTHAMPTON GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$24,900 00
Machinery and manufacturing appliances,	3,000 00
Street mains,	20,000 00
Due for gas,	1,982 18
Gas coal on hand,	3,253 77
Coke on hand,	16 50
Tar on hand,	46 00
Enrichers on hand,	475 38
Purifying materials on hand,	50 00
Other gas materials on hand,	804 70
Stoves on hand,	108 85
Spent lime,	20 00
New holder construction,	1,337 75
Sundry accounts due the company,	992 84
Cash on hand,	2,445 95
Investments,	5,375 50
Total assets, as per books of the company,	\$64,809 42

LIABILITIES.

Capital stock,	\$50,000 00
Reserve fund,	5,418 50

Total liabilities, as per books of the company,	\$55,418 50
Profit and loss balance,	9,390 92

\$64,809 42

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$6,290 16
Balance of gas manufacturing account,		4,704 85
Interest received,		425 01
Rents,		206 25
Sale of bonds,		2,000 00
Dividends declared,	\$4,000 00	
Other items,	235 35	
Balance June 30, 1891,	9,390 92	
	<u>\$13,626 27</u>	<u>\$13,626 27</u>

NORTH ATTLEBOROUGH GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$47,474 72
Machinery and manufacturing appliances,	24,981 42
Street mains,	27,278 93
Meters,	4,665 51
Due for gas,	1,290 80
Gas coal on hand,	3,374 98
Coke on hand,	122 88
Tar on hand,	192 52
Enrichers on hand,	310 16
Purifying materials on hand,	52 75
Other gas materials on hand,	554 30
Stoves on hand,	526 37
Gas fixtures on hand,	856 21
Sundry accounts due the company,	297 25
Office furniture,	262 50
Cash on hand,	13,168 68

Total assets, as per books of the company,	\$125,409 98
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LIABILITIES.

Capital stock,	\$68,100 00
Bonds issued,	47,670 00
Unpaid bills,	101 17
Unpaid dividends,	2,043 00
Interest due but not paid,	715 05

Total liabilities, as per books of the company,	\$118,629 22
Profit and loss balance,	6,780 76

\$125,409 98

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$9,509 65
Balance of gas manufacturing account,		11,872 17
Interest received,		403 94
Rents,		209 51
Other items of income,		109 32
Dividends declared,	\$4,086 00	
Interest paid,	2,860 20	
Depreciation,	8,303 74	
Other items,	73 89	
Balance June 30, 1891,	6,780 76	
	<u>\$22,104 59</u>	<u>\$22,104 59</u>

NORTH ATTLEBOROUGH STEAM AND ELECTRIC COMPANY.

ASSETS.

Real estate,	\$18,375 00
Steam plant,	24,047 00
Electric plant,	32,001 04
Lines, meters, lamps and globes,	36,613 31
Due for electric light and power,	1,510 71
Fuel on hand,	5,242 85
Carbons on hand,	36 00
Oil and waste on hand,	90 00
Incandescent lamps on hand,	231 24
Globes on hand,	9 86
Other electric materials on hand,	2,650 00
Motors on hand,	3,000 00
Electric fixtures on hand,	513 87
Sundry accounts due the company,	2,407 79
Office furniture,	52 75
Cash on hand,	398 15
Notes receivable,	21 06
Total assets, as per books of the company,	<u>\$127,200 63</u>

LIABILITIES.

Capital stock,	\$80,000 00
Bonds issued,	30,000 00
Notes payable,	9,353 36
Unpaid bills,	6,374 10
Amounts due from the company not included above,	930 82

Total liabilities, as per books of the company,	\$126,658 28
Profit and loss balance,	542 35

\$127,200 63

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$8,153 11
Balance of electric manufacturing account,		1,684 89
Rents,		325 67
Dividends declared,	\$6,160 00	
Interest paid,	2,515 28	
Depreciation,	946 04	
Balance June 30, 1891,	542 35	
	<u>\$10,163 67</u>	<u>\$10,163 67</u>

NORTH SHORE ELECTRIC COMPANY (REVERE).

ASSETS.	
Real estate,	\$15,274 65
Steam plant,	39,774 00
Electric plant,	86,988 35
Lines, meters, lamps and globes,	75,527 25
Patent rights,	10,000 00
Due for electric light and power,	3,848 06
Fuel on hand,	88 00
Carbons on hand,	20 00
Oil and waste on hand,	37 20
Incandescent lamps on hand,	216 10
Globes on hand,	28 50
Other electric materials on hand,	513 16
Horses, wagons, etc.,	320 50
Sundry accounts due the company,	81 14
Office furniture,	187 30
Cash on hand,	1,158 32
Notes receivable,	276 44
Unexpired insurance, taxes and interest,	328 15
Total assets, as per books of the company,	\$234,667 12
Profit and loss balance,	323 31
	<u>\$234,990 43</u>

LIABILITIES.	
Capital stock,	\$125,000 00
Bonds issued,	75,000 00
Notes payable,	25,269 02
Unpaid bills,	7,928 61
Interest due but not paid,	1,792 80
Total liabilities, as per books of the company,	<u>\$234,990 43</u>

PROFIT AND LOSS ACCOUNT.		Dr.	Cr.
Balance June 30, 1890,		\$481 17	
Revaluation of lines,			\$400 00
Balance of electric manufacturing account,			2,009 95
Construction charged twice,			627 39
Expense items charged twice,			6,013 11
Interest paid,	8,892 59		
Balance June 30, 1891,			323 31
		<u>\$9,373 76</u>	<u>\$9,373 76</u>

NORWOOD GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$3,000 00
Machinery and manufacturing appliances, }	8,118 57
Street mains,	
Meters,	834 91
Due for gas,	570 30
Gas coal on hand,	114 00
Cash on hand,	519 87
Total assets, as per books of the company,	<u>\$13,157 65</u>

LIABILITIES.

Capital stock,	\$12,000 00
Total liabilities, as per books of the company,	\$12,000 00
Profit and loss balance,	1,157 65
	<u>\$13,157 65</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$932 82
Balance of gas manufacturing account,	\$31 56	
Other items of income,		256 39
Balance June 30, 1891,	1,157 65	
	<u>\$1,189 21</u>	<u>\$1,189 21</u>

ORANGE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$1,600 00
Steam plant,	8,447 89
Electric plant,	4,970 40
Lines, meters, lamps and globes,	20,032 22
Due for electric light and power,	560 43
Fuel on hand,	286 00
Carbons on hand,	10 00
Oil and waste on hand,	28 95
Incandescent lamps on hand,	9 00
Globes on hand,	3 50
Other electric materials on hand,	377 15
Cash on hand,	905 00
Tools,	111 99
Interest and taxes unexpired,	293 04

Total assets, as per books of the company,	\$37,635 62
Profit and loss balance,	5,267 36
	<u>\$42,902 98</u>

LIABILITIES.

Capital stock,	\$25,000 00
Bonds issued,	15,000 00
Unpaid bills,	2,902 98

Total liabilities, as per books of the company,	\$42,902 98
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,	\$3,872 66	
Balance of electric manufacturing account,		\$1,118 09
Error in return of previous year,	1,762 79	
Interest paid,	750 00	
Balance June 30, 1891,		5,267 36
	<u>\$6,385 45</u>	<u>\$6,385 45</u>

PALMER ELECTRIC COMPANY.

ASSETS.

Real estate,	\$6,297 06
Steam plant,	11,144 74
Electric plant,	18,761 75
Lines, meters, lamps and globes,	23,259 65
Patent rights,	6,000 00
Due for electric light and power,	2,200 94
Fuel on hand,	173 25
Carbons on hand,	15 00
Oil and waste on hand,	42 00
Incandescent lamps on hand,	187 50
Cash on hand,	12 46
Total assets, as per books of the company,	<u>\$68,094 35</u>

LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	20,000 00
Notes payable,	300 00
Unpaid bills,	16,153 64
Total liabilities, as per books of the company,	<u>\$66,453 64</u>
Profit and loss balance,	1,640 71
	<u>\$68,094 35</u>

PROFIT AND LOSS ACCOUNT.

	DE.	CR.
Balance June 30, 1890,		\$1,075 70
Balance of electric manufacturing account,		1,166 22
Other items of income,		607 09
Interest paid,	\$1,208 30	
Balance June 30, 1891,	1,640 71	
	<u>\$2,849 01</u>	<u>\$2,849 01</u>

PITTSFIELD ELECTRIC COMPANY.

ASSETS.

Real estate,	\$32,967 46
Steam plant,	24,034 67
Electric plant,	54,316 97
Lines, meters, lamps and globes,	23,273 28
Due for electric light and power,	4,037 07
Fuel on hand,	480 01
Carbons on hand,	34 45
Oil and waste on hand,	177 66
Incandescent lamps on hand,	120 21
Globes on hand,	55 53
Other electric materials on hand,	381 15
Tools,	678 42
Office furniture,	459 66
Cash on hand,	351 90
Unexpired insurance and interest,	578 42
Total assets, as per books of the company,	<u>\$141,946 86</u>

LIABILITIES.

Capital stock,	\$100,000 00
Notes payable,	29,502 39
Unpaid bills,	8,653 47
Amounts due from the company, not included above,	706 51

Total liabilities, as per books of the company,	\$138,867 37
Profit and loss balance,	3,079 49

\$141,946 86

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$3,432 05
Interest received,		26 40
Rents,		481 25
Other items of income,		10 00
Interest paid,	\$726 49	
Other items,	143 81	
Balance June 30, 1891,	3,079 49	
	<u>\$3,949 79</u>	<u>\$3,949 79</u>

PITTSFIELD COAL GAS COMPANY.

ASSETS.

Real estate,	\$30,650 85
Machinery and manufacturing appliances,	30,906 12
Street mains,	19,110 00
Meters,	6,540 00
Due for gas,	3,603 54
Gas coal on hand,	2,680 19
Enrichers on hand,	306 25
Stoves on hand,	25 00
Sundry accounts due the company,	16 75
Cash on hand,	1,047 36
Notes receivable,	45,702 00
Investments,	3,550 00
Total assets, as per books of the company,	\$144,138 06

LIABILITIES.

Capital stock,	\$62,500 00
Notes payable,	26,500 00
Unpaid bills,	4,231 52
Reserve fund,	40,000 00

Total liabilities, as per books of the company,	\$133,231 52
Profit and loss balance,	10,906 54

\$144,138 06

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$9,718 71
Balance of gas manufacturing account,		9,123 55
Interest received,		479 28
Dividends declared,	\$7,500 00	
Interest paid,	915 00	
Balance June 30, 1891,	10,906 54	
	<u>\$19,321 54</u>	<u>\$19,321 54</u>

PLYMOUTH ELECTRIC LIGHT COMPANY.

ASSETS.	
Real estate,	\$7,951 06
Steam plant,	24,881 51
Electric plant,	34,047 88
Lines, meters, lamps and globes,	27,458 97
Franchise,	8,000 00
Due for electric light and power,	2,251 78
Fuel on hand,	4 75
Carbons on hand,	47 25
Oil and waste on hand,	38 25
Incandescent lamps on hand,	116 60
Globes on hand,	9 00
Motors on hand,	275 00
Sundry accounts due the company,	847 08
Office furniture,	77 00
Cash on hand,	685 18
Unexpired insurance and taxes,	203 17

Total assets, as per books of the company, \$106,894 48

LIABILITIES.	
Capital stock,	\$40,000 00
Bonds issued,	30,000 00
Unpaid bills,	35,711 31
Interest due but not paid,	734 64

Total liabilities, as per books of the company, \$106,445 95

Profit and loss balance, 448 53

\$106,894 48

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$348 14
Balance of electric manufacturing account,		1,155 18
Amount of old accounts payable of, July 1, 1890, and Dec. 31, 1890, since paid and charged to the several construction and expense accounts in error,		7,958 49
Amount of office furniture and fixtures received in payment of lighting bill previous to June 30, 1890, and not credited,		77 00
Interest paid,	\$6,033 23	
Amount of old accounts receivable July 1, 1890, since received and credited to the several income accounts in error,	3,057 05	
Balance June 30, 1891,	448 53	
	<u>\$9,538 81</u>	<u>\$9,538 81</u>

PLYMOUTH GAS LIGHT COMPANY.

ASSETS.	
Real estate,	\$40,000 00
Machinery and manufacturing appliances,	
Street mains,	
Meters,	
Due for gas,	1,768 12

Gas coal on hand,	\$893 48
Coke on hand,	90 00
Tar on hand,	90 00
Enrichers on hand,	17 40
Other gas materials on hand,	244 41
Stoves on hand,	82 00
Gas fixtures on hand,	1,353 90
Sundry accounts due the company,	254 71
Cash on hand,	372 28
Total assets, as per books of the company,	\$45,166 30

LIABILITIES.

Capital stock,	\$40,000 00
Unpaid bills,	803 80
Unpaid dividends,	71 50
Amounts due from the company, not included above,	245 30
Total liabilities, as per books of the company,	\$41,120 60
Profit and loss balance,	4,045 70
	\$45,166 30

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$4,268 27
Balance of gas manufacturing account,		2,277 43
Dividends declared,	\$2,000 00	
Depreciation,	500 00	
Balance June 30, 1891,	4,045 70	
	\$6,545 70	\$6,545 70

QUINCY (see CITIZEN'S GAS LIGHT COMPANY).

QUINCY ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$9,588 14
Steam plant,	92,358 52
Electric plant,	
Lines, meters, lamps and globes, }	2,030 42
Due for electric light and power,	
Fuel on hand,	400 00
Carbons on hand,	25 00
Oil and waste on hand,	42 40
Incandescent lamps on hand,	284 03
Globes on hand,	35 92
Other electric materials on hand,	63 50
Electric fixtures on hand,	218 80
Horses, wagons, etc.,	275 00
Office furniture,	108 45
Cash on hand,	731 65
Total assets, as per books of the company,	\$106,161 83

LIABILITIES.

Capital stock,	\$67,500 00
Notes payable,	33,364 79
Unpaid dividends,	230 00

Total liabilities, as per books of the company,	\$101,094 79
Profit and loss balance,	5,067 04

\$106,161 83

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$1,980 06
Balance of electric manufacturing account,		6,945 55
Rents,		116 25
Other items of income,		17 00
Dividends declared,	\$2,500 00	
Interest paid,	1,248 66	
Other items,	243 16	
Balance June 30, 1891,	5,067 04	
	<hr/>	<hr/>
	\$9,058 86	\$9,058 86

ROXBURY GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$116,365 91
Machinery and manufacturing appliances,	304,563 30
Street mains,	322,948 31
Meters,	77,285 41
Due for gas,	25,909 17
Gas coal on hand,	6,031 37
Enrichers on hand,	19 50
Purifying materials on hand,	539 68
Other gas materials on hand,	3,704 01
Patent rights,	50,000 00
Sundry accounts due the company,	2,105 19
Cash on hand,	62,920 73
Notes receivable,	32,000 00
Gas on hand,	1,099 63

Total assets, as per books of the company,	\$1,005,492 21
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LIABILITIES.

Capital stock,	\$600,000 00
Unpaid bills,	787 65
Deposits,	4,401 00
Amounts due from the company, not included above,	2,460 01

Total liabilities, as per books of the company,	\$607,648 66
Profit and loss balance,	397,843 55

\$1,005,492 21

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$423,480 48
Balance of gas manufacturing account,		34,900 79
Interest received,		2,530 31
Rents,		1,557 09
Dividends declared,	\$60,000 00	
Depreciation,	4,625 12	
Balance June 30, 1891,	397,843 55	
	<u>\$462,468 67</u>	<u>\$462,468 67</u>

SALEM ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$44,000 00
Steam plant,	} 152,000 00
Electric plant,	
Lines, meters, lamps and globes,	
Franchise,	10,000 00
Due for electric light and power, jobbing, etc.,	7,527 71
Fuel on hand,	1,772 50
Carbons on hand,	100 00
Globes on hand,	55 13
Other electric materials on hand,	259 56
Sundry accounts due the company,	442 99
Furniture and fixtures,	700 00
Cash on hand,	3,347 43
Sinking fund,	1,000 00
Total assets, as per books of the company,	<u>\$221,205 32</u>

LIABILITIES.

Capital stock,	\$140,000 00
Bonds issued,	40,500 00
Unpaid bills,	724 84
Surplus fund,	10,000 00

Total liabilities, as per books of the company,	\$191,224 84
Profit and loss balance,	29,980 48
	<u>\$221,205 32</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$18,242 93
Jobbing account,		1,129 49
Balance of electric manufacturing account,		35,362 25
Premiums on bonds,		62 00
Rents,		298 98
Other items of income,		163 41
Dividends declared,	\$8,400 00	
Interest paid,	2,510 70	
Depreciation,	4,367 88	
Surplus account,	10,000 00	
Balance June 30, 1891,	29,980 48	
	<u>\$55,259 06</u>	<u>\$55,259 06</u>

SALEM GAS LIGHT COMPANY.

ASSETS.

Real estate,	}	
Machinery and manufacturing appliances,		
Street mains,		
Meters,		
Due for gas,		10,751 11
Gas coal on hand,		8,814 20
Enrichers on hand,		7 65
Purifying materials on hand,		187 34
Other gas materials on hand,		1,573 61
Stoves on hand,		189 71
Gas fixtures on hand,		732 53
Horse, wagons, etc.,		560 00
Sundry accounts due the company,		518 00
Office furniture,		200 00
Cash on hand,		7,629 79
Investments,		3,885 25
Total assets, as per books of the company,		<u>\$373,664 42</u>

LIABILITIES.

Capital stock,	\$300,000 00
Deposits,	447 00
Depreciation fund,	20,000 00
Amounts due from the company, not included above,	5,502 35
Total liabilities, as per books of the company,	<u>\$325,949 39</u>
Profit and loss balance,	47,715 03
	<u>\$373,664 42</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$53,226 52
Balance of gas manufacturing account,		17,424 06
Interest received,		160 87
Rents,		162 25
Dividends declared,	\$19,500 00	
Construction charged off,	3,758 67	
Balance June 30, 1891,	47,715 03	
	<u>\$70,793 70</u>	<u>\$70,793 70</u>

SOMERVILLE ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$20,957 43
Steam plant,	33,294 67
Electric plant,	41,172 57
Lines, meters, lamps and globes,	117,119 04
Due for electric light and power,	4,706 32
Fuel on hand,	2,210 00
Carbons on hand,	247 87
Oil and waste on hand,	72 95
Incandescent lamps on hand,	977 41
Globes on hand,	29 08
Other electric materials on hand,	786 40

Belting,	\$809 17
Apparatus and machinery,	524 81
Horses, wagons, etc.,	550 00
Sundry accounts due the company,	1,273 82
Office furniture,	395 66
Cash on hand,	528 54
Total assets, as per books of the company,	<u>\$225,655 74</u>

LIABILITIES.

Capital stock,	\$161,400 00
Notes payable,	55,000 00
Unpaid bills,	1,438 83
Total liabilities, as per books of the company,	<u>\$217,838 83</u>
Profit and loss balance,	7,816 91
	<u>\$225,655 74</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$5,745 74
Balance of electric manufacturing account,		13,037 04
Dividends declared,	\$3,208 00	
Interest paid,	2,757 87	
Balance June 30, 1891,	7,816 91	
	<u>\$18,782 78</u>	<u>\$18,782 78</u>

SOUTH BOSTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$200,945 76
Machinery and manufacturing appliances, }	277,609 15
Street mains,	
Meters,	19,877 12
Due for gas,	7,924 97
Gas coal on hand,	5,702 51
Coke on hand,	1,491 00
Gas on hand,	143 18
Purifying materials on hand,	390 00
Other gas materials on hand,	1,230 12
Patent rights,	25,000 00
Horses, wagons, etc.,	1,454 00
Sundry accounts due the company,	2,417 34
Cash on hand,	21,574 33
Investments,	26,000 00
Total assets, as per books of the company,	<u>\$591,759 48</u>

LIABILITIES.

Capital stock,	\$440,000 00
Notes payable,	48,000 00
Unpaid bills,	1,346 23
Deposits,	1,988 95
Amounts due from the company, not included above,	784 61
Total liabilities, as per books of the company,	<u>\$492,119 79</u>
Profit and loss balance,	99,639 69
	<u>\$591,759 48</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$79,195 12
Balance of gas manufacturing account,		45,412 95
Rents,		1,660 00
Dividends declared,	\$22,000 00	
Interest paid,	4,275 87	
Depreciation,	352 51	
Balance June 30, 1891,	99,639 69	
	<u>\$126,268 07</u>	<u>\$126,268 07</u>

SOUTHBIDGE GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$5,515 49
Machinery and manufacturing appliances (gas),	1,041 83
Street mains (gas),	7,056 00
Meters (gas),	1,416 93
Due for gas,	164 45
Gas coal on hand,	6 13
Tar on hand,	22 00
Enrichers on hand,	190 11
Other gas materials on hand,	228 35
Gas fixtures on hand,	135 26
Real estate (electric),	3,622 91
Steam plant (electric),	9,351 59
Electric plant,	10,773 87
Lines, meters, lamps and globes,	14,418 46
Franchise,	2,650 00
Due for electric light and power,	43 39
Fuel on hand (electric light),	308 70
Carbons on hand,	43 42
Oil and waste on hand,	38 13
Incandescent lamps on hand,	16 80
Other electric materials on hand,	79 60
Horses, wagons, etc.,	235 00
Office furniture,	125 50
Cash on hand,	785 54
Total assets, as per books of the company,	<u>\$58,269 46</u>

LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	13,500 00
Unpaid bills,	11 69
Total liabilities, as per books of the company,	<u>\$53,511 69</u>
Profit and loss balance,	4,757 77
	<u>\$58,269 46</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$2,574 82
Balance of gas manufacturing account,		657 43
Balance of electric manufacturing account,		3,967 03

Revaluation of plant,		\$1,038 04
Dividends declared,	\$2,200 00	
Interest paid,	666 50	
Depreciation,	613 05	
Balance June 30, 1891,	4,757 77	
	<u>\$8,237 32</u>	<u>\$8,237 32</u>

SOUTH HADLEY FALLS ELECTRIC LIGHT COMPANY.

ASSETS.

Steam plant,	\$1,249 71
Electric plant,	4,950 00
Lines, meters, lamps and globes,	3,661 00
Due for electric light and power,	696 93
Incandescent lamps on hand,	65 00
Other electric materials on hand,	64 70
Total assets, as per books of the company,	<u>\$10,687 34</u>

LIABILITIES.

Capital stock,	\$7,000 00
Amounts due from the company, not included above,	3,687 34
Total liabilities, as per books of the company,	<u>\$10,687 34</u>

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of electric manufacturing account,		\$723 62
Interest paid,	\$150 00	
Depreciation,	573 62	
	<u>\$723 62</u>	<u>\$723 62</u>

SPENCER GAS COMPANY.

ASSETS.

Real estate (gas),	\$22,440 01
Machinery and manufacturing appliances (gas),	74,265 64
Street mains (gas),	35,866 68
Meters (gas),	3,636 08
Due for gas,	2,565 69
Gas coal on hand,	87 60
Coke on hand,	4 00
Tar on hand,	24 00
Enrichers on hand,	145 20
Purifying materials on hand,	6 00
Stoves on hand,	1,343 44
Gas fixtures on hand,	520 84
Steam plant (electric),	3,369 50
Electric plant,	24,462 17
Lines, meters, lamps and globes, }	
Patent rights,	484 47
Carbons on hand,	23 00

Oil and waste on hand,	\$42 00
Pipe and fittings,	485 06
Gas engine,	800 00
Tools,	450 00
Meter provers,	25 00
Sundry accounts due the company,	4,531 41
Office furniture,	150 00
Notes receivable,	250 00

Total assets, as per books of the company,	\$175,977 69
Profit and loss balance,	10,548 30

\$186,525 99

LIABILITIES.

Capital stock,	\$85,000 00
Bonds issued,	85,000 00
Unpaid bills,	1,377 26
Interest due,	2,550 00
Amounts due from the company, not included above,	12,598 73

Total liabilities, as per books of the company,	\$186,525 99
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PROFIT AND LOSS ACCOUNT.

	DE.	CR.
Balance June 30, 1890,	\$9,615 55	
Balance of gas manufacturing account,		\$2,270 82
Balance of electric manufacturing account,		926 43
Gain on sale of gas engine,		200 00
Rents,		770 00
Interest paid,	5,100 00	
Balance June 30, 1891,		10,548 30
	<hr/>	<hr/>
	\$14,715 55	\$14,715 55

SPRINGFIELD (see UNITED ELECTRIC LIGHT COMPANY).

SPRINGFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$166,203 69
Machinery and manufacturing appliances (gas),	209,537 08
Street mains and services (gas),	196,018 83
Meters (gas),	29,308 19
Due for gas,	13,008 27
Gas coal on hand,	6,117 56
Tar on hand,	1,500 00
Enrichers on hand,	614 37
Purifying materials on hand,	275 75
Gas engine and other gas materials on hand,	676 14
Stoves on hand,	675 75
Gas burners on hand,	813 24
Real estate (steam),	79,198 81
Steam plant,	
Steam meters and fittings,	

Due for steam,	\$3,029 46
Horses, wagons, etc.,	2,500 00
Sundry accounts due the company,	1,725 98
Office furniture,	1,365 10
Cash on hand,	13,729 64
Notes receivable,	670 20

Total assets, as per books of the company, \$726,971 06

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	50,000 00
Deposits,	679 34
Amounts due from the company, not included above,	3,277 08

Total liabilities, as per books of the company, \$553,956 42

Profit and loss balance, 173,014 64

\$726,971 06

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$156,303 92
Balance of gas manufacturing account,		59,332 36
Interest received,		693 20
Rents,		1,340 72
Dividends declared,	\$40,000 00	
Interest paid,	2,953 86	
Depreciation,	1,701 70	
Balance June 30, 1891,	173,014 64	
	\$217,670 20	\$217,670 20

STOUGHTON GAS AND ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	\$1,000 00
Machinery and manufacturing appliances (gas),	4,400 00
Street mains (gas),	6,600 00
Steam plant (electric),	3,000 00
Electric plant,	9,000 00
Lines, meters, lamps and globes, }	
Cash on hand,	110 20

Total assets, as per books of the company, \$24,110 20

LIABILITIES.

Capital stock,	\$24,000 00
Total liabilities, as per books of the company,	\$24,000 00
Profit and loss balance,	110 20
	\$24,110 20

SUBURBAN LIGHT AND POWER COMPANY.

ASSETS.

Steam plant,	}		
Electric plant,			
Lines, meters, lamps and globes,			\$18,910 17
Franchise,			75,000 00
Due for electric light and power,			1,475 20
Sundry accounts due the company,			125 25

Total assets, as per books of the company,	\$95,510 62
Profit and loss balance,	15,187 83
	<u>\$110,698 50</u>

LIABILITIES.

Capital stock,	\$83,000 00
Notes payable,	12,792 52
Unpaid bills,	7,385 32
Interest accrued,	683 77
Amounts due from the company, not included above,	6,836 89

Total liabilities, as per books of the company,	\$110,698 50
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,	\$5,890 88	
Balance of electric manufacturing account,	8,416 26	
Interest,	683 77	
Other items,	196 97	
Balance June 30, 1891,		\$15,187 88
	<u>\$15,187 88</u>	<u>\$15,187 88</u>

TAUNTON ELECTRIC LIGHTING COMPANY.

ASSETS.

Real estate,	\$11,198 21
Steam plant,	18,177 46
Electric plant,	23,997 34
Lines, meters, lamps and globes,	12,947 16
Due for electric light and power,	1,793 36
Fuel on hand,	30 00
Carbons on hand,	50 00
Oil and waste on hand,	20 00
Incandescent lamps on hand,	50 00
Globes on hand,	25 00
Other electric materials on hand,	50 00
Cash on hand,	79 96

Total assets, as per books of the company,	\$68,418 49
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LIABILITIES.

Capital stock,	\$40,000 00
Notes payable,	12,500 00
Unpaid bills,	1,294 03

Total liabilities, as per books of the company,	\$53,794 03
Profit and loss balance,	14,624 46

\$68,418 49

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$9,257 72
Gain on unpaid bills,		605 61
Gain on bills for lighting,		295 70
Balance of electric manufacturing account,		6,491 90
Wiring,		130 47
Insurance,		843 25
Other items of income,		332 63
Dividends declared,	\$2,800 00	
Interest paid,	532 82	
Balance June 30, 1891,	14,624 46	
	\$17,957 28	\$17,957 28

TAUNTON GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$26,500 00
Machinery and manufacturing appliances,	53,500 00
Due for gas,	10,736 47
Gas coal on hand,	2,540 00
Coke on hand,	14 00
Tar on hand,	195 00
Enrichers on hand,	17 40
Purifying materials on hand,	51 75
Gas on hand,	224 00
Stoves on hand,	1,566 71
Gas fixtures on hand,	3,319 62
Sundry accounts due the company,	2,823 23
Cash on hand,	5,542 41
Lungren lamps,	911 83

Total assets, as per books of the company,	\$107,942 42
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LIABILITIES.

Capital stock,	\$80,000 00
Deposits,	197 00

Total liabilities, as per books of the company,	\$80,197 00
Profit and loss balance,	27,745 42

\$107,942 42

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$26,993 36
Balance of gas manufacturing account,		19,060 10
Rents,		150 00
Dividends declared,	\$8,000 00	
Construction charged off,	9,832 69	
Depreciation,	625 35	
Balance June 30, 1891,	27,745 42	
	<hr/>	<hr/>
	\$46,203 46	\$46,203 46

TURNER'S FALLS (see FRANKLIN ELECTRIC LIGHT COMPANY).

UNION ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$5,282 47
Steam plant,	9,421 57
Electric plant,	17,889 09
Lines, meters, lamps and globes,	20,128 50
Due for electric light and power,	889 22
Fuel on hand,	14 40
Carbons on hand,	29 09
Oil and waste on hand,	20 77
Incandescent lamps on hand,	98 94
Globes on hand,	4 00
Other electric materials on hand,	27 91
Tools,	149 30
Horses, wagons, etc.,	200 00
Sundry accounts due the company,	221 59
Office furniture,	50 00
Cash on hand,	1,292 08
Taxes and unexpired insurance,	98 22
	<hr/>
Total assets, as per books of the company,	\$55,817 15
Profit and loss balance,	3,064 67
	<hr/>
	\$58,881 82

LIABILITIES.

Capital stock,	\$20,000 00
Bonds issued,	30,000 00
Unpaid bills,	7,981 82
Interest due but not paid,	900 00
	<hr/>
Total liabilities, as per books of the company,	\$58,881 82

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,	\$2,016 15	
Balance of electric manufacturing account,		\$670 17
Other items of income,		131 31
Interest paid,	1,800 00	
Balance June 30, 1891,		3,064 67
	<hr/>	<hr/>
	\$3,816 15	\$3,816 15

UNITED ELECTRIC LIGHT COMPANY (SPRINGFIELD).

ASSETS.

Real estate,	\$95,150 50
Steam plant,	93,932 87
Electric plant,	146,980 72
Lines, meters, lamps and globes,	114,327 66
Due for electric light and power,	6,992 95
Fuel on hand,	4,354 61
Carbons on hand,	1,792 24
Oil and waste on hand,	104 26
Incandescent lamps on hand,	663 87
Globes on hand,	340 59
Other electric materials on hand,	2,595 89
Motors on hand,	14,411 75
Electric fixtures on hand,	180 45
Horses, wagons, etc.,	440 00
Sundry accounts due the company,	9,284 39
Office furniture,	522 72
Cash on hand,	5,083 28
	<hr/>
Total assets, as per books of the company,	\$497,158 75

LIABILITIES.

Capital stock,	\$372,700 00
Notes payable,	103,000 00
Unpaid bills,	12,429 27
Amounts due from the company, not included above,	208 07

Total liabilities, as per books of the company,	\$488,337 34
Profit and loss balance,	8,821 41

\$497,158 75

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance of electric manufacturing account,		\$32,586 15
Rents,		1,248 02
Dividends declared,	\$18,000 00	
Interest paid,	5,395 31	
Other items,	1,617 45	
Balance June 30, 1891,	8,821 41	
	<hr/>	<hr/>
	\$33,834 17	\$33,834 17

UXBRIDGE AND NORTHBRIDGE ELECTRIC COMPANY.

ASSETS.

Real estate,	\$6,363 63
Steam plant,	8,039 46
Electric plant,	8,427 62
Lines, meters, lamps and globes,	28,562 99
Fuel on hand,	340 00
Carbons on hand,	30 00
Oil and waste on hand,	92 22
Other electric materials on hand,	1,295 73
Electric fixtures on hand,	197 84
Horses, wagons, etc.,	308 07
Sundry accounts due the company,	965 40
Office furniture,	39 03
Cash on hand,	1 81
Total assets, as per books of the company,	<u>\$54,663 80</u>

LIABILITIES.

Capital stock.	\$34,200 00
Notes payable,	19,000 00
Unpaid bills,	1,217 09
Total liabilities, as per books of the company,	<u>\$54,417 09</u>
Profit and loss balance,	246 71

\$54,663 80

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance of electric manufacturing account,		\$852 96
Interest paid,	\$606 25	
Balance June 30, 1891,	246 71	
	<u>\$852 96</u>	<u>\$852 06</u>

WAKEFIELD (see CITIZENS' GAS LIGHT COMPANY).

WALTHAM GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$31,868 84
Machinery and manufacturing appliances (gas),	80,084 49
Street mains (gas),	49,800 00
Meters (gas),	5,500 00
Due for gas,	7,515 89
Gas coal on hand,	610 20
Coke on hand,	4 50
Tar on hand,	496 15
Purifying materials on hand,	104 00
Other gas materials on hand,	1,250 74
Stoves on hand,	150 69
Gas fixtures on hand,	1,234 12
Steam plant (electric),	25,834 33

Electric plant,	\$25,059 66
Lines, meters, lamps and globes,	27,401 84
Due for electric light and power,	3,690 23
Carbons on hand,	104 12
Oil and waste on hand,	52 31
Incandescent lamps on hand,	236 85
Globes on hand,	15 37
Other electric materials on hand,	1,579 25
Horses, wagons, etc.,	979 18
Sundry accounts due the company,	2,601 08
Office furniture,	765 98
Cash on hand,	306 71

Total assets, as per books of the company, \$267,246 53

LIABILITIES.

Capital stock,	\$140,000 00
Bonds issued,	20,000 00
Notes payable,	29,000 00

Total liabilities, as per books of the company, \$189,000 00

Profit and loss balance, 78,246 53

\$267,246 53

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$62,779 71
Balance of gas manufacturing account,		22,734 05
Balance of electric manufacturing account,		5,291 98
Other items of income,		55 43
Dividends declared,	\$9,800 00	
Interest paid,	2,390 11	
Depreciation,	424 53	
Balance June 30, 1891,	78,246 53	
	\$90,861 17	\$90,861 17

WALWORTH LIGHT AND POWER COMPANY (BOSTON).

ASSETS.

Steam plant,	\$17,945 86
Electric plant,	8,852 81
Lines, meters, lamps and globes,	6,201 25
Due for electric light and power,	1,259 86
Motors on hand,	200 00
Office furniture,	241 39
Cash on hand,	532 69

Total assets, as per books of the company, \$35,233 86

LIABILITIES.

Capital stock,	\$15,000 00
Bonds issued,	9,625 00
Notes payable,	500 00

Unpaid bills,	\$657 44
Interest due but not paid,	206 26
Depreciation fund,	3,557 66
Amounts due from the company, not included above,	687 50

Total liabilities, as per books of the company,	\$30,233 86
Profit and loss balance,	5,000 00

\$35,233 86

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$4,062 56
Balance of electric manufacturing account,		2,101 25
Income from other business,		3,383 08
Interest paid,	\$645 66	
Depreciation,	3,901 23	
Balance June 30, 1891,	5,000 00	
	<hr/>	<hr/>
	\$9,546 89	\$9,546 89

WARE ELECTRIC COMPANY.

ASSETS.

Real estate,	\$6,505 23
Steam plant, }	
Electric plant, }	12,467 00
Lines, meters, lamps and globes,	16,115 32
Due for electric light and power,	485 22
Fuel on hand,	500 00
Electric materials on hand,	266 78
Tools,	450 28
Cash on hand,	221 53

Total assets, as per books of the company,	\$37,011 41
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LIABILITIES.

Capital stock,	\$20,000 00
Notes payable,	15,500 00
Unpaid bills,	37 50
Interest accrued,	326 67

Total liabilities, as per books of the company,	\$35,864 17
Profit and loss balance,	1,147 24

\$37,011 41

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance Jan. 10, 1891,		\$352 17
Balance of electric manufacturing account,		902 82
Old bills collected,		245 90
Other items of income,		3 52
Interest accrued,	\$357 17	
Balance June 30, 1891,	1,147 24	
	<hr/>	<hr/>
	\$1,504 41	\$1,504 41

WEBSTER ELECTRIC COMPANY.

ASSETS.

Real estate (gas),	}	
Machinery and manufacturing appliances (gas),		
Street mains (gas),		
Meters (gas),		\$30,469 90
Due for gas,		338 97
Gas coal on hand,		875 52
Coke on hand,		12 00
Gas on hand,		25 00
Other gas materials on hand,		21 75
Stoves on hand,		30 20
Real estate (electric),	}	
Steam plant (electric),		
Electric plant,		
Lines, meters, lamps and globes,		47,488 33
Due for electric light and power,		783 64
Fuel on hand (electric light),		598 64
Carbons on hand,		63 00
Oil and waste on hand,		51 00
Incandescent lamps on hand,		55 50
Globes on hand,		4 60
Other electric materials on hand,		1,404 70
Sundry accounts due the company,		75 12
Office furniture,		131 50
Cash on hand,		937 26
Total assets, as per books of the company,		<u>\$83,366 63</u>

LIABILITIES.

Capital stock,	\$45,000 00
Bonds issued,	30,000 00
Notes payable,	2,454 24
Unpaid bills,	1,428 62
Interest due but not paid,	69 00
Total liabilities, as per books of the company,	<u>\$78,951 86</u>
Profit and loss balance,	4,414 77
	<u>\$83,366 63</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$3,102 49
Balance of gas manufacturing account,		1,115 47
Balance of electric manufacturing account,		2,066 09
Interest received,		12 00
Interest paid,	\$1,881 28	
Balance June 30, 1891,	4,414 77	
	<u>\$6,296 05</u>	<u>\$6,296 05</u>

WESTBOROUGH ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$5,768 38
Steam plant,	7,005 10
Electric plant,	10,805 45
Lines, meters, lamps and globes,	14,682 76
Franchise,	4,500 00
Due for electric light and power,	745 22
Other electric materials on hand,	883 72
Sundry accounts due the company,	135 12
Cash on hand,	6 75
Total assets, as per books of the company,	\$44,532 50
Profit and loss balance,]	45 18
	<hr/> \$44,577 68

LIABILITIES.

Capital stock,	\$25,000 00
Notes payable,	18,800 00
Unpaid bills,	777 68
Total liabilities, as per books of the company,	<hr/> \$44,577 68

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$93 25
Balance of electric manufacturing account,		1,181 31
Rents,		240 00
Dividends declared,	\$250 00	
Interest paid,	1,179 56	
Other items,	130 18	
Balance June 30, 1891,		45 18
	<hr/> \$1,559 74	<hr/> \$1,559 74

WESTFIELD GAS LIGHT COMPANY.

ASSETS.

Real estate (gas),	\$2,430 00
Machinery and manufacturing appliances (gas),	29,691 17
Street mains (gas),	13,583 51
Meters (gas),	1,489 11
Due for gas,	2,313 30
Gas coal on hand,	1,077 14
Services,	1,668 88
Enrichers on hand,	265 22
Purifying materials on hand,	1 80
Stoves on hand,	65 04
Gas fixtures on hand,	118 08
Real estate (electric),	9,406 01
Steam plant (electric),	6,476 71
Electric plant,	4,804 70
Lines, meters, lamps and globes,	10,772 78

Converters,	\$1,550 43
Due for electric light and power,	891 78
Fuel on hand (electric light),	248 59
Carbons on hand,	68 14
Oil and waste on hand,	84 73
Globes on hand,	15 55
Electric supplies on hand,	17 45
Sundry accounts due the company,	236 75
Cash on hand,	4,508 40

Total assets, as per books of the company, \$91,785 27

LIABILITIES.

Capital stock,	\$54,000 00
Notes payable,	21,500 00
Depreciation fund,	2,767 46

Total liabilities, as per books of the company, \$78,267 46

Profit and loss balance, 13,517 81

\$91,785 27

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$11,974 05
Balance of gas manufacturing account,		6,160 87
Balance of electric manufacturing account,		3,613 23
Rents,		31 32
Other items of income,		80
Dividends declared,	\$4,320 00	
Interest paid,	1,175 00	
To depreciation fund,	2,767 46	
Balance June 30, 1891,	13,517 81	
	\$21,780 27	\$21,780 27

WEYMOUTH LIGHT AND POWER COMPANY.

ASSETS.

Real estate,	\$11,905 41
Steam plant,	16,455 93
Electric plant,	26,824 50
Lines, meters, lamps and globes,	78,256 59
Due for electric light and power,	3,013 16
Fuel on hand,	611 25
Carbons on hand,	28 50
Oil and waste on hand,	41 04
Incandescent lamps on hand,	159 50
Globes on hand,	2 40
Other electric materials on hand,	1,517 00

Horses, wagons, etc.,	\$259 00
Office furniture,	50 00
Cash on hand,	227 82

Total assets, as per books of the company, \$139,352 55

LIABILITIES.

Capital stock,	\$50,000 00
Bonds issued,	50,000 00
Notes payable,	25,000 00
Unpaid bills,	10,442 02

Total liabilities, as per books of the company, \$135,442 02

Profit and loss balance, 3,910 53

\$139,352 55

WHITMAN ELECTRIC COMPANY.

ASSETS.

Real estate,	\$218 39
Steam plant,	1,894 91
Electric plant,	5,103 00
Lines, meters, lamps and globes,	17,304 20
Due for electric light and power,	236 86
Carbons on hand,	70 00
Oil and waste on hand,	36 50
Incandescent lamps on hand,	29 00
Globes on hand,	1 75
Other electric materials on hand,	154 28
Horses, wagons, etc.,	150 00
Sundry accounts due the company,	11 41
Office furniture,	14 00
Cash on hand,	982 37

Total assets, as per books of the company, \$26,206 67

Profit and loss balance, 1,109 15

\$27,315 82

LIABILITIES.

Capital stock,	\$20,000 00
Unpaid bills,	7,315 82

Total liabilities, as per books of the company, \$27,315 82

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$907 38
Balance of electric manufacturing account,		290 62
Assets duplicated in former balance,	\$1,399 77	
Unpaid bills omitted in former balance,	907 38	
Balance June 30, 1891,		1,109 15
	<u>\$2,307 15</u>	<u>\$2,307 15</u>

WILLIAMSTOWN GAS COMPANY.

ASSETS.

Real estate,		
Machinery and manufacturing appliances,	}	
Street mains,		\$30,051 01
Meters,		250 95
Due for gas,		518 42
Fuel on hand,		64 00
Street lamps,		60 00
Tools,		70 00
Oil on hand,		130 00
Pipe and fittings,		396 54
Other gas materials on hand,		10 50
Gas fixtures on hand,		78 95
Sundry accounts due the company,		148 49
Cash on hand,		80 79

Total assets, as per books of the company,	\$31,859 65
Profit and loss balance,	1,125 19
	<hr/>
	\$32,984 84

LIABILITIES.

Capital stock,	\$20,000 00
Bonds issued,	10,000 00
Notes payable,	1,503 60
Unpaid bills,	581 24
Interest due but not paid,	900 00

Total liabilities, as per books of the company,	\$32,984 84
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$51 63
Balance of gas manufacturing account,		450 32
Street lamps,		90 17
Service pipe and fittings,		104 61
Other items of income,		1 45
Interest paid,	\$906 22	
Depreciation,	911 69	
Other items,	5 46	
Balance June 30, 1891,		1,125 19
	<hr/>	<hr/>
	\$1,823 37	\$1,823 37

WINCHENDON ELECTRIC LIGHT AND POWER COMPANY.

ASSETS.

Steam plant,	\$215 48
Electric plant,	7,639 29
Lines, meters, lamps and globes,	9,341 93
Due for electric light and power,	260 40
Fuel on hand,	5 00

Carbons on hand,	\$5 00
Oil and waste on hand,	22 50
Other electric materials on hand,	795 96
Sundry accounts due the company,	225 56
Cash on hand,	183 88

Total assets, as per books of the company,	\$18,695 00
Profit and loss balance,	886 64
	<u>\$19,581 64</u>

LIABILITIES.

Capital stock,	\$12,000 00
Unpaid bills,	7,581 64

Total liabilities, as per books of the company,	\$19,581 64
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PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,	\$145 58	
Balance of electric manufacturing account,	741 06	
Balance June 30, 1891,		\$886 64
	<u>\$886 64</u>	<u>\$886 64</u>

WOBURN ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$22,640 53
Steam plant,	30,367 83
Electric plant,	50,970 05
Lines, meters, lamps and globes,	135,736 05
Patent rights,	21,000 00
Due for electric light and power,	2,809 19
Fuel on hand,	122 50
Carbons on hand,	50 00
Oil and waste on hand,	26 50
Incandescent lamps on hand,	236 00
Globes on hand,	29 33
Other electric materials on hand, }	4,832 71
Electric fixtures on hand,	
Horses, wagons, etc.,	580 05
Sundry accounts due the company,	42 02
Office furniture,	195 60
Cash on hand,	236 55
Notes receivable,	8,577 17

Total assets, as per books of the company,	\$278,452 08
Profit and loss balance,	2,720 76
	<u>\$281,172 84</u>

LIABILITIES.

Capital stock,	\$120,000 00
Bonds issued,	100,000 00
Notes payable,	56,387 69
Unpaid bills,	4,785 15

Total liabilities, as per books of the company,	\$281,172 84
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PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$1,480 52
Balance of electric manufacturing account,		3,599 20
Other items of income,		202 39
Dividends declared,	\$1,800 00	
Interest paid,	6,202 87	
Balance June 30, 1891,		2,720 76
	<hr/>	<hr/>
	\$8,002 87	\$8,002 87

WOBURN GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$9,500 00
Machinery and manufacturing appliances,	28,000 00
Street mains,	28,000 00
Meters,	3,000 00
Due for gas,	1,897 45
Gas coal on hand,	3,250 00
Coke on hand,	30 00
Tar on hand,	221 13
Enrichers on hand,	33 84
Purifying materials on hand,	50 00
Gas fixtures on hand,	235 00
Office furniture,	140 25
Cash on hand,	768 93
Investments,	12,300 00
Total assets, as per books of the company,	<hr/> \$87,426 60

LIABILITIES.

Capital stock,	\$45,100 00
Deposits,	5 00
Total liabilities, as per books of the company,	<hr/> \$45,105 00
Profit and loss balance,	42,321 60
	<hr/> \$87,426 60

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$41,680 40
Balance of gas manufacturing account,		3,847 40
Interest received,		577 03
Other items of income,		174 77
Dividends declared,	\$3,608 00	
Other items,	350 00	
Balance June 30, 1891,	42,321 60	
	<hr/>	<hr/>
	\$46,279 60	\$46,279 60

WORCESTER ELECTRIC LIGHT COMPANY.

ASSETS.

Real estate,	\$80,037 65
Steam plant,	55,119 94
Electric plant,	61,886 09

Lines, meters, lamps and globes,	\$67,880 60
Due for electric light and power,	7,255 78
Fuel on hand,	101 20
Carbons on hand,	859 50
Oil and waste on hand,	54 68
Incandescent lamps on hand,	490 63
Globes on hand,	429 13
Other electric materials on hand,	2,249 16
Electric fixtures and tools on hand,	2,070 10
Sundry accounts due the company,	1,003 73
Office furniture,	1,061 87
Cash on hand,	13,026 99
Total assets, as per books of the company,	<u>\$293,527 05</u>

LIABILITIES.

Capital stock,	\$200,000 00
Notes payable,	75,000 00
Unpaid bills,	1,651 58
Total liabilities, as per books of the company,	<u>\$276,651 58</u>
Profit and loss balance,	16,875 47
	<u>\$293,527 05</u>

PROFIT AND LOSS ACCOUNT.

	DR.	CR.
Balance June 30, 1890,		\$19,174 34
Balance of electric manufacturing account,		26,074 63
Rents,		313 50
Other items of income,		244 57
Dividends declared,	\$16,000 00	
Interest paid,	3,426 19	
Depreciation,	9,505 38	
Balance June 30, 1891,	16,875 47	
	<u>\$45,807 04</u>	<u>\$45,807 04</u>

WORCESTER GAS LIGHT COMPANY.

ASSETS.

Real estate,	\$126,000 00
Machinery and manufacturing appliances,	179,207 75
Street mains,	225,648 69
Meters,	20,854 31
Due for gas,	792 19
Gas coal on hand,	21,254 93
Coke on hand,	600 00
Tar on hand,	2,798 25
Enrichers on hand,	779 97
Other gas materials on hand,	5,805 69
Stoves on hand,	1,357 02
Gas fixtures on hand,	
Cash on hand,	3,336 74
Investments,	3,352 50
Total assets, as per books of the company,	<u>\$591,788 04</u>

LIABILITIES.

Capital stock,	\$500,000 00
Notes payable,	40,000 00
Deposits,	1,696 00
Unpaid dividends,	10,050 00

Total liabilities, as per books of the company,	\$551,746 00
Profit and loss balance,	40,042 04
	<hr/>
	\$591,788 04

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance June 30, 1890,		\$36,881 79
Balance of gas manufacturing account,		71,217 67
Interest received,		434 44
Other items of income,		103 55
Dividends declared,	\$40,000 00	
Interest paid,	1,829 23	
Construction charged off,	26,653 20	
Other items,	112 93	
Balance June 30, 1891,	40,042 04	
	<hr/>	<hr/>
	\$108,637 45	\$108,637 45

ANDOVER ELECTRIC COMPANY.*

ASSETS.

Real estate,	\$12,380 80
Steam plant,	10,387 86
Electric plant,	18,451 98
Lines, meters, lamps and globes,	13,417 62
Due for electric light and power,	622 99
Fuel on hand,	60 00
Carbons on hand,	18 00
Oil and waste on hand,	13 00
Incandescent lamps on hand,	100 00
Globes on hand,	3 00
Horses, wagons, etc.,	150 00
Office furniture,	95 00
Cash on hand,	3,469 39

Total assets, as per books of the company,	\$59,169 64
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LIABILITIES.

Capital stock,	\$30,000 00
Bonds issued,	15,500 00
Notes payable,	10,993 75

* Corrected too late for insertion in the proper place.

Unpaid bills,	\$485 01
Interest accrued,	173 20
<hr/>	
Total liabilities, as per books of the company,	\$57,151 96
Profit and loss balance,	2,017 68
<hr/>	
	\$59,169 64

PROFIT AND LOSS.

	DR.	CR.
Balance June 30, 1890,		\$323 70
Wiring and jobbing,		77 58
Balance of electric manufacturing account,	\$198 78	
Interest received,		139 09
Revaluation of office furniture,		95 00
Gain on notes payable,		2,400 00
Interest paid,	755 82	
Depreciation,	144 50	
Other items,		81 41
Balance June 30, 1891,	2,017 68	
<hr/>		<hr/>
	\$3,116 78	\$3,116 78

APPENDIX B.

[CHAP. 360, ACTS OF 1891.]

AN ACT AUTHORIZING THE COMMISSIONER OF CORPORATIONS TO
CHANGE THE NAMES OF CORPORATIONS.

Be it enacted, etc., as follows :

SECTION 1. The commissioner of corporations may authorize any corporation subject to the provisions of chapters one hundred and six, one hundred and seven, one hundred and eight, one hundred and nine, one hundred and ten, one hundred and twelve, one hundred and thirteen, one hundred and fourteen, one hundred and fifteen, one hundred and sixteen, one hundred and seventeen, one hundred and eighteen and one hundred and nineteen of the Public Statutes, and acts amendatory of any of said chapters, to change its name, upon notice and hearing, as hereinafter set forth: *provided*, such corporation shall, previously to its application to the commissioner of corporations for change of its name, at a meeting called for that purpose have voted, by a vote of two-thirds of the stockholders present and voting at the meeting, to change its name and adopt a new one.

SECT. 2. Before authorizing a change of name, as provided in section one, the commissioner shall require public notice of the application therefor to be given, that all persons may appear to show cause, if any they have, why the application should not be granted.

SECT. 3. When such change of name shall have been authorized by the commissioner of corporations, a certified copy of his authorization of the same, together with a certificate setting forth the vote of the corporation to so change its name and adopt a new one, signed and sworn to by the president, treasurer and a majority of the directors, shall be filed in the office of the secretary of the Commonwealth. And the commissioner shall require public notice to be given of the change so authorized; and on receipt of proof thereof the secretary of the Commonwealth may grant a certificate of the name which the corporation shall bear, and which shall thereafter be its legal name, subject however to the provisions of

chapter two hundred and fifty-seven of the acts of the year eighteen hundred and ninety-one.

SECT. 4. A corporation under its new name shall have the same rights, powers and privileges, and be subject to the same duties, obligations and liabilities as before such change, and may sue and be sued by its own name; but any action brought against it by its former name shall not be defeated on that account, and, on motion of either party, the new name can be substituted therefor in the action.

SECT. 5. The secretary of the Commonwealth shall prepare and submit to the general court, together with the abstract of certificates required by section two of chapter one hundred and six of the Public Statutes, a statement of all names of the corporations changed under the provisions of this act.

SECT. 6. In the case of corporations not having a capital stock, a two thirds vote of the persons legally qualified to vote in meetings of the corporation, and present and voting on the question of change, shall be sufficient, in lieu of the vote of the stockholders required by section one of this act; and in the case of corporations not having a president, treasurer and directors, the certificate of the vote of the corporation required by section three of this act shall be sufficient if signed and sworn to by the presiding and the financial officer and a majority of its other officers having the power of directors, by whatever name called. [*Approved May 28, 1891.*]

[CHAP. 370, ACTS OF 1891.]

AN ACT TO ENABLE CITIES AND TOWNS TO MANUFACTURE AND
DISTRIBUTE GAS AND ELECTRICITY.

Be it enacted, etc., as follows:

SECTION 1. Any city or town may, under the limitations of this act, construct, purchase, lease or establish, and maintain within its limits one or more plants for the manufacture or distribution of gas or electricity for furnishing light for municipal use, and for the use of such of its inhabitants as may require and pay for the same as herein provided. Such plants may include suitable land, structures, easements, water privileges, stations, gasometers, boilers, engines, dynamos, tools, machinery, pipes, conduits, poles, conductors, burners, lamps and other apparatus and appliances for making, generating, distributing and using gas or electricity for lighting purposes.

SECT. 2. No city shall exercise the authority conferred in section one until a vote that it is expedient to exercise such authority

shall have passed each branch of its city council by a two thirds vote and received the approval of the mayor in each of two consecutive municipal years, and thereafter have been ratified by a majority of the voters present and voting thereon at an annual municipal election. When such a vote has failed to secure such ratification no similar vote shall be submitted for ratification until after the expiration of five years thereafter.

SECT. 3. No town shall exercise the authority conferred in section one until after a vote that it is expedient to exercise such authority shall have been passed by a vote of not less than two thirds of the voters present and voting at each of two legal town-meetings duly called for the purpose, of which meetings the second shall be held at an interval of not less than two nor more than thirteen months after the first. At such meetings such vote shall be taken by written or printed ballot and by the use of the check-list. When such a vote has failed of passage as hereinbefore provided at the second of said meetings, no similar vote shall be passed until after the expiration of two years thereafter.

SECT. 4. Any city or town establishing or purchasing a plant within its limits as provided in this act, or reconstructing, extending or enlarging the same as provided in section five, may pay for the same by the issue of bonds, payable in a term not exceeding thirty years and bearing interest at a rate not exceeding five per cent., which shall not be disposed of for less than par and accrued interest, and the indebtedness thereby created shall not be included in the limit of indebtedness of such city or town provided by law; but such bonds shall not be issued until a vote authorizing the same has been passed by the vote required by section seven of chapter twenty-nine of the Public Statutes, and the whole amount of bonds so issued by a city or town, and outstanding, shall not exceed at their par value the amount of five per cent. of the total valuation of estates therein in the case of a town, or two and one half per cent. of such valuation in the case of a city according to the last preceding state valuation. The interest on such bonds and a sinking fund to meet the same at maturity shall be provided for as required by section nine of said chapter twenty-nine. No indebtedness shall be incurred by any city or town in connection with such plant except as aforesaid, and excepting further that money may be borrowed under the provisions of section six of said chapter twenty-nine as amended, to pay the operating expenses thereof. All receipts from the sale of gas or electricity shall be paid over to the treasurer of such city or town. The gross expenses of running such plant and conducting such business of supplying gas or electric light, including interest on such bonds

and requirement of the sinking fund as aforesaid, shall be included in the appropriations made annually or from time to time by such city or town, and shall be paid out of the treasury thereof.

SECT. 5. Any city or town owning a plant for the manufacture or distribution of gas, or electricity may reconstruct, extend or enlarge the same, but no such reconstruction, extension or enlargement beyond the necessary and ordinary maintenance, repair and replacement thereof, except such increased appliances for the distribution of gas and electricity as may be necessary to furnish the same to new takers, shall be undertaken or made except by the vote provided by section four in case of the issue of bonds.

SECT. 6. Any city or town obtaining a plant may provide by ordinance, if a city, or by by-laws, if a town, for the equitable assessment upon the owner or occupant of any premises of any part or the whole of the cost of laying and maintaining upon such premises, pipes, conduits, conductors or other appliances for the distribution of gas or electricity to the occupants thereof. Payment of such assessments shall not be obligatory, but shall be made a condition precedent to the supply of gas or electricity to the occupants of such premises, and may be exacted before providing any such appliances for such distribution.

SECT. 7. Any city or town having obtained a plant for the purpose, as provided in this act, may manufacture, generate and distribute gas or electricity for furnishing light for municipal use or for the use of its inhabitants, under such regulations as it may establish. No city or town shall be compelled to furnish gas or electricity to any person or corporation except upon order of the gas and electric light commissioners and after payment of any assessment provided for in section six. . Any person or corporation aggrieved by the refusal of any city or town supplying gas or electricity under the authority of this act to furnish the same may appeal to such commissioners, setting forth in such appeal what is required of the city or town, in such detail as the commissioners may require.

SECT. 8. Whenever any city or town shall obtain a plant as provided in section one, the operation, control, management and repair thereof, the manufacture, generation and distribution of gas and electricity thereby, including the purchase of supplies, the hiring and discharge of employees, and all business relating to such manufacture, generation and distribution, to the methods, amounts, times, prices and quality of the supply to each person and corporation, the collection of bills, the keeping of accounts and custody of moneys received for gas or electricity or otherwise, and the payment of bills incurred in said business, shall be entrusted,

subject to any ordinances established by the city council in a city, or the by-laws or regulations established in a town, to one officer, who shall be appointed and may be removed by the mayor in a city, and by the selectmen in a town. Such officer shall be known as manager of gas, manager of electric light, or manager of gas and electric light, according as a plant for one or both may be under his charge. In cities, the compensation of such officer shall be annually fixed by the city council, and in towns by the selectmen. Before entering upon the duties of his office he shall give bond to the city or town for the faithful performance of his duties in such sum and form and with such sureties as the mayor or selectmen shall approve. He shall at the end of each municipal year render to the mayor or selectmen such detailed statement of his doings and of the business and financial matters in his charge as the gas and electric light commissioners may prescribe. He shall also at any time, when required by the mayor or selectmen, make to him or them a statement of his doings, business, receipts, disbursements, balances, and of the indebtedness of the city or town in his department, in the detail required; and he shall pay over to the treasurer of the city or town all receipts collected.

SECT. 9. The books and accounts pertaining to the business authorized by this act shall be kept in a form to be prescribed by the board of gas and electric light commissioners, and the accounts shall be closed on the thirtieth day of June in each year so that a balance sheet of that date can be taken therefrom and included in the return to said board, which return shall be for the year ending the thirtieth day of June. The mayor or selectmen and manager shall annually, on or before the second Wednesday of September in each year, make a return to said board in a form prescribed by it, setting forth the financial condition of said business, the amount of indebtedness authorized or existing on account thereof, a statement of income and expenses in such detail as the board may require, with a list of salaried officers employed in said business and the amount of salary paid to each. Said return shall be signed and sworn to by the mayor or a majority of the selectmen, and in both cities and towns by the manager. The mayor of a city or the selectmen of a town may direct, in addition, any additional returns to be made at such time and in such detail as they may order. The mayor or selectmen and manager shall also at all times, on request, submit said books and accounts for the inspection of said board, and furnish any statement or information required by the board concerning the condition, management and operation of said business.

SECT. 10. The price to be charged for gas or electricity to per-

sons and corporations shall be fixed, and shall not be changed oftener than once in three months. Any change shall take effect on the first day of a month, and the new price adopted shall, before the change shall take effect, be advertised in some newspaper published in the city or town where the plant is, if any is published therein. Such price shall not, except with the written consent of the gas and electric light commissioners, be fixed at less than cost, in which shall be included in addition to all operating expenses, interest on the net investment in plant made by the city or town, less assessments collected under section six, at the rate paid upon the bonds above provided for, together with the requirements of the sinking fund established to meet such bonds, and also depreciation of the plant, to be reckoned at not less than five per cent. per annum of its cost, and losses; but any losses exceeding three per cent. of the investment in plant may be charged in different years at not more than such three per cent. per annum. Such price shall not be greater than shall allow above such cost a profit of eight per cent. per annum to the city or town upon its net investment. In fixing such cost to establish the price to be charged to persons and corporations the gas and electricity used by the city or town shall be charged to it at cost. A sufficient deposit to secure the payment for gas or electricity for three months may be required in advance from any taker, and the supply may be shut off from any premises until all arrearages for gas or electricity furnished thereon, to whomsoever furnished, shall be paid. After three months default in the payment of such arrearages all appliances for distribution belonging to the city or town on such premises may be removed, and after such removal shall not be restored except on payment of all such arrearages, and a sufficient sum to cover all expenses caused by removal and restoration.

SECT. 11. Any city operating a plant under this act may pass ordinances, and any town operating a plant under this act may, subject to the approval of the superior court, adopt by-laws imposing penalties not exceeding fifty dollars to protect its plant, control its use, prevent accidents from gas or electricity supplied by such city or town, and govern consumers in their use thereof.

SECT. 12. When any city or town shall decide as hereinbefore provided to establish a plant, and any person, firm or corporation shall at the time of the first vote required for such decision be engaged in the business of making, generating or distributing gas or electricity for sale for lighting purposes in such city or town, such city or town shall, if such person, firm or corporation shall elect to sell and shall comply with the provisions of this act, pur-

chase of such person, firm or corporation before establishing a public plant such portion of his, their or its gas or electric plant and property suitable and used for such business in connection therewith as lies within the limits of such city or town. If in such city or town a single corporation owns or operates both a gas plant and an electric plant, such purchase shall include both of such plants, but otherwise such city or town shall only be obliged to purchase the existing gas plant or plants if it has voted only to establish a gas plant, and shall only be obliged to purchase the existing electric plant or plants if it has only voted to establish an electric plant. If the main gas works, in the case of a gas plant, or the central lighting station, in the case of an electric light plant, lie within the limits of the city or town which has voted to establish a plant as aforesaid, such city or town shall purchase as herein provided the whole of such plant and property used in connection therewith, lying within its limits, and the price to be paid therefor shall be its fair market value for the purposes of its use, no portion of such plant to be estimated, however, at less than its fair market value for any other purpose, including as an element of value the earning capacity of such plant based upon the actual earnings being derived from such use at the time of the final vote of such city or town to establish a plant, and also any locations or similar rights acquired from private persons in connection therewith, plus the damages suffered by the severance of any portion of such plant lying outside of the limits of such city or town, and minus the amount of any mortgage or other encumbrance or lien to which the plant so purchased, or any part thereof, may be subject at the time of transfer of title; but such city or town may require that such plant and property be transferred to it free and clear from any mortgage or lien, unless the commissioners appointed under the provisions of section thirteen of this act shall otherwise determine. Such value shall be estimated without enhancement on account of future earning capacity, or good will, or of exclusive privileges derived from rights in the public streets. When any capital has been paid in, in property instead of in cash, the valuation placed upon such property in estimating it as paid in capital shall not be conclusive in estimating its value under the foregoing provisions, but may be disputed by a city or town, and if shown to have been excessive may be reduced by the authority fixing the price of the plant and property as hereinafter provided. If the main gas works or central lighting station of such a plant do not lie within the limits of the city or town which has voted as aforesaid, then such city or town shall only purchase that portion of such plant and property which lies within its limits,

paying therefor upon the basis of value above established, but without allowance of damages on account of severance of plant. No city or town shall be obligated by this section to buy any apparatus or appliances covered by letters patent of the United States or embodying a patentable invention unless a complete right to use the same and all other apparatus or appliances necessary for such use within the limits of such city or town to such extent as such city or town shall reasonably require such right, shall be assigned or granted to such city or town at a cost as low as the cost of such right would be to the person, firm or corporation whose plant is purchased.

SECT. 13. Any person, firm or corporation desiring to enforce the obligation of any city or town under section twelve to purchase any property shall file with the clerk of such city or town, within thirty days after the passage of the final vote whereby such city or town shall have decided to establish a plant, a detailed schedule describing such property and stating the terms of sale proposed. If the parties fail to agree as to what shall be sold, or what the terms of sale and delivery in accordance with the provisions of this act shall be, either party may within sixty days after the filing of the schedule apply by petition to the supreme judicial court, or any justice thereof, setting forth the facts and praying an adjudication between the parties, and thereafter such court or justice shall, after giving both parties an opportunity to be heard, appoint a special commissioner or commissioners, who shall give the parties an opportunity to be heard, and shall thereafter adjudicate what property, real or personal, including rights and easements, shall be sold by the one and purchased by the other, in accordance with the provisions of this act, and what the price, time and other conditions of the sale and delivery thereof shall be. Such commissioner or commissioners shall file his or their award in the supreme judicial court for revision or confirmation by said court.

SECT. 14. Any party aggrieved by the award of the commissioner or commissioners may within fourteen days after its filing, or within such longer time as the court may allow, file objections thereto, and apply to the court for a hearing on such award relative to any matter of fact or law pertaining to the same, and thereupon the court shall order a trial to be had before said court or a justice thereof, after due notice to all parties interested in the matter of said award, in the manner of hearings in equity. The decree of the court upon said award shall be final and binding and said court shall have jurisdiction in equity to compel compliance therewith, and may also issue and enforce such interlocutory decrees and orders as justice may require.

SECT. 15. Whenever the existing gas plant or electric plant of any person or corporation shall have been acquired by any city or town pursuant to the provisions of this act, the powers and rights of such person or corporation in relation to the manufacture and distribution of gas or electricity within the limits of such city or town shall, from and after the date of such acquirement, cease and determine.

SECT. 16. Any city or town owning or operating a plant or plants for the manufacture or distribution of gas or electricity for furnishing light under this act, shall be responsible for any injury or damage to persons or property, happening or arising by reason of the maintenance or operation of the same, in the same manner and to the same extent as though the same were owned and operated by an individual or private corporation; but nothing in this act shall be construed to include damages to any existing gas or electric plant in a city or town by reason of the establishment of a competing line or plant under authority of this act.

SECT. 17. All general laws of the Commonwealth, and all ordinances or by-laws of any city or town availing itself of the provisions of this act, relative to the manufacture, use, generation or distribution of gas or electricity, or the quality thereof, or plant or the appliances therefor, shall apply to such city or town, so far as the same may be applicable and not inconsistent with this act, in the same manner as the same apply to persons and corporations engaged in making, generating or distributing gas or electricity therein.

SECT. 18. Nothing herein shall be construed to take away, restrict or impair any rights of any city, town or other authority which may now exist to revoke locations of wires, poles, conduits or pipes in, over or under their streets or ways: *provided, however*, that no city or town having within its limits the main gas works, in the case of a gas plant, or the central lighting station, in the case of an electric light plant, or the major portion of the wires, poles, conduits or pipes used in connection with any such works or plants, shall, except for a violation of the terms or conditions upon which the same were granted or for a violation of law respecting the exercise thereof, revoke any rights heretofore granted, or which may hereafter be granted, to any person or corporation engaged in the business of making, generating or distributing gas or electricity for sale for lighting purposes, after the first passage by the city council, in the case of a city, of the vote provided for by section two, or while such vote is pending in either branch thereof, or in the case of a town, after the passage of the first vote provided for in section three, or after the calling of a town-meet-

ing at which the passage of such vote is included in the warrant: *provided, however*, that in case in either a city or town the second vote provided for by this act shall fail of passage or in a city shall fail to receive the approval of the mayor or the ratification of the voters in accordance with this act, then such city or town may exercise all rights of revocation, if any, which it possessed prior to the passage of such first vote until such first vote is again passed, or pending or included in the warrant as above provided. And after the passage and ratification of both votes as provided in section two, by a city, and after the passage of both votes as provided by section three, by a town, no such city or town shall, except as hereinbefore provided, revoke any rights, locations or licenses granted to any such person or corporation. The provisions of this section shall apply, in the case of a city, whether such revocation shall be made by both branches of the city government or by either branch thereof.

SECT. 19. This act shall take effect upon its passage. [*Approved June 4, 1891.*]

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